DOCUMENT RESUME

ED 074 265 VT 019 704

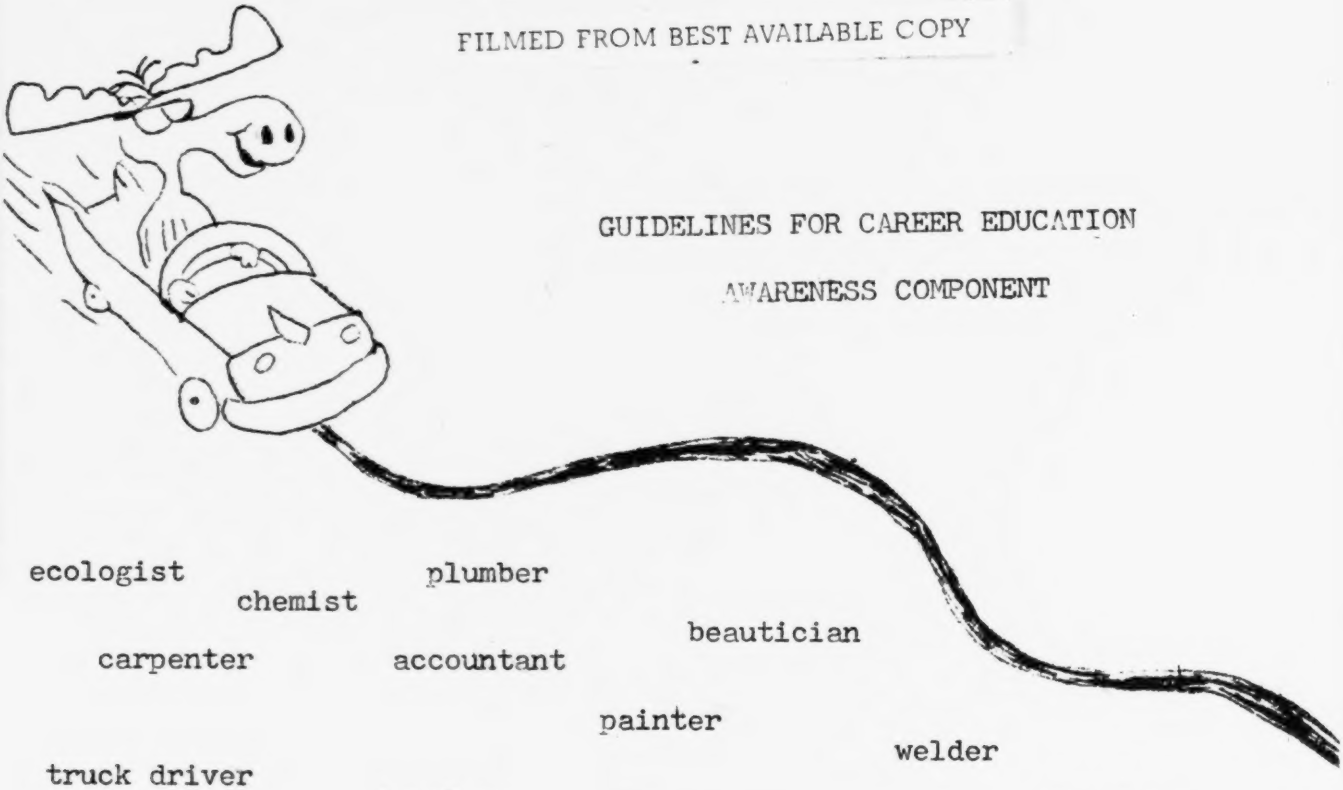
AUTHOR	Mead, Rosemary; And Others
TITLE	Guidelines for Career Awareness.
INSTITUTION	Owensboro Extension Center, Ky.
PUB DATE	72
NOTE	161p.
EDRS PRICE	MF-$0.65 HC-$6.58
DESCRIPTORS	Behavioral Objectives; *Career Education; *Curriculum Development; Elementary Grades; *Guidelines; Humanities; Learning Activities; Lesson Plans; Occupational Clusters; *Regional Planning; *Regional Programs; Resource Materials; Speeches; Vocational Development
IDENTIFIERS	*Career Awareness

ABSTRACT

These extensive guidelines for integrated career education programs at the elementary level were developed by a regional coordinator, an elementary teacher, and an intermediate teacher at a 2-week regional workshop in western Kentucky. The ten chapters include: (1) a rationale for developing career awareness, (2) self-evaluation guidelines for the coordinator and the teacher, (3) suggestions for unit development, (4) sample lesson plans, (5) suggested learning activities, (6) behavioral objectives, (7) concepts, (8) resource lists, (9) an overview of selected career education programs, and (10) excerpts from current speeches about career education. Cartoons illustrate the text, which includes occupational information for various occupational clusters. (AG)

FILMED FROM BEST AVAILABLE COPY

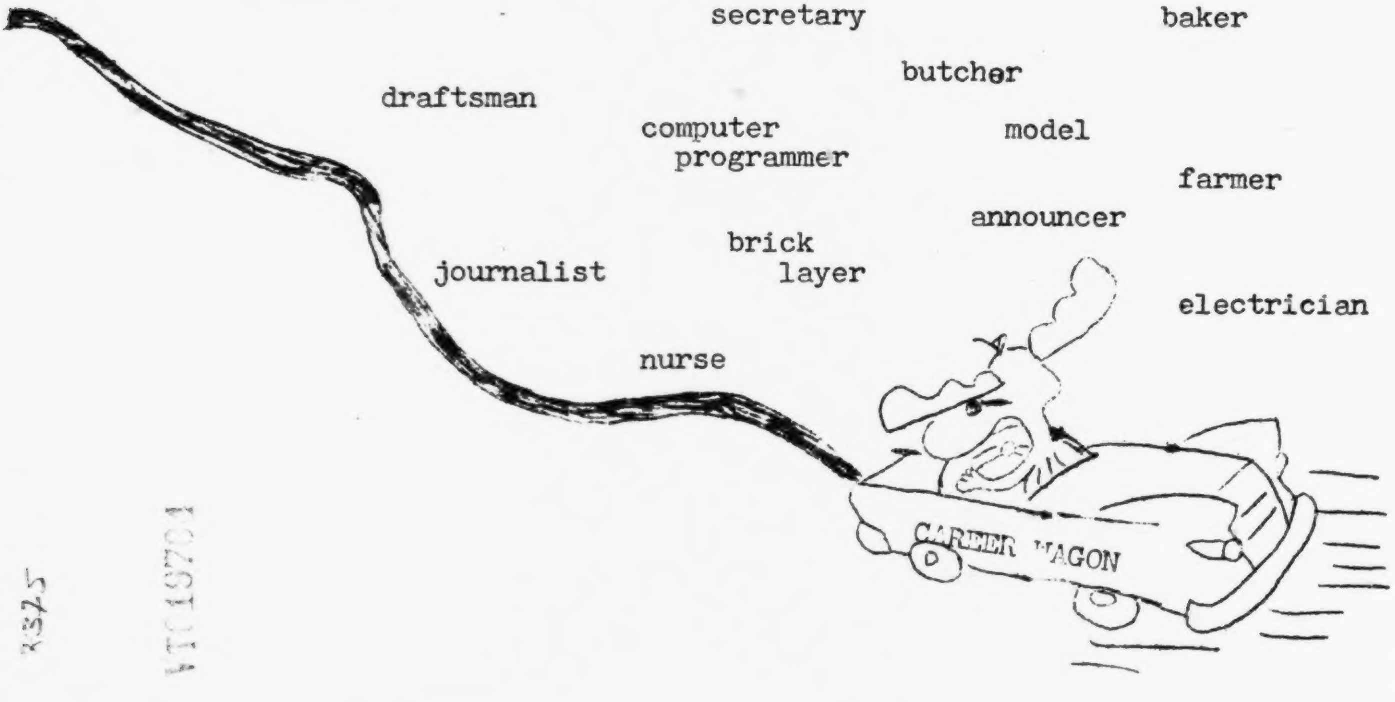
ED 074265



GUIDELINES FOR CAREER EDUCATION

AWARENESS COMPONENT

ecologist
plumber
chemist
beautician
carpenter
accountant
painter
welder
truck driver
jeweler
teacher
historian
astronaut
forester
lawyer
writer
machinist
lab technician
salesman
surgeon
athelete
musician
secretary
baker
butcher
draftsman
computer programmer
model
farmer
announcer
brick layer
journalist
electrician
nurse



325

VT019701

ED 074265

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

presenting

GUIDELINES FOR CAREER AWARENESS

written and compiled by

Rosemary Mead - Regional Coordinator
Jerry Mischel - Intermediate Teacher,
Newton Parrish School
Martha Simpson - Primary Teacher,
Slaughters Elementary School

Regional Career Education
Developmental Project
1501 Frederica Street
Owensboro, Kentucky 42301

TABLE OF CONTENTS

I. Introduction
  - A. Letter to Teachers
  - B. Letter to Students

II. Self-evaluation Guidelines
  - A. District Awareness Liaison Coordinator
  - B. Teacher

III. Suggestions for Unit Writing

IV. Sample Lesson Plans
  - A. Money Machine
  - B. The Bank Occupations
  - C. The Earth, A Great Depository
  - D. People Do Many Kinds of Work
  - E. Why Work
  - F. The World of the Farmer

V. List of Suggested Activities
  - A. Language Arts
  - B. Mathematics
  - C. Community Resources

VI. Examples of Behavioral Objectives

VII. Concepts to Teach

VIII. List of Commercial Career Education Materials
  - A. Science Research Associates, Inc.
  - B. Eye Gate
  - C. Singer/SVE World of Work
  - D. Student Bibliography
  - E. Staff Resources

IX. A National Overview of Selected Career Education Programs

X. A Review of Current Speeches
  - A. A New Emphasis on Career Education--President Nixon
  - B. The World of Work--Dean Tate Page
  - C. Followup and Revision of Curriculum Materials-- W. G. Collins
  - D. Current Social Observers--Edwin L. Herr
  - E. Career Education A Developmental Process--Carl F. Lamar

FAN MAIL
US
MAIL
MAIL

"WILL YOU KEEP THOSE LETTERS COMING IN, FOLKS?"

REGIONAL CAREER EDUCATION DEVELOPMENT PROJECT
Owensboro Extension Center
1501 Frederica Street
Owensboro, Kentucky 42301
Telephone 502-685-5531

August 1, 1972

Dear Teachers,

You are now embarking on a unique venture toward making education more responsive to the needs of the students in your classrooms. It's been about a year and a half since U. S. Commissioner of Education Sidney P. Marland, Jr. introduced the subject, the concept, and the philosophy of career education to the nation's educators. What has gone on in the interval has been an attempt to give the philosophy a form. The ideas are becoming living programs on a large-scale basis.

Career education programs have been adopted in selected school systems in most regions of the United States. However, this is the first time that the ideas are being implemented on such a vast scale as we are now challenged to prove feasible; that is, incorporating the program simultaneously in seven counties of Western Kentucky which includes ten school districts.

Before the two week regional workshop which began on June 16, 1972, it seemed like an impossibility at times. Our staff here in Owensboro spent quite a bit of time visiting your schools and giving talks to luncheon groups. We met all the superintendents in the ten school districts. We met a large number of school principals, curriculum supervisors, and guidance counselors. Then during that two week workshop we met a number of the classroom teachers. Perhaps you've guessed it. Those classroom teachers made the difference. We came away feeling happy and assured. We realize that we need the support of our administrators and the help of well-trained counselors and we are grateful to have such a cooperative team of leaders. But no program really gets 'turned-on' without the enthusiastic support of teachers. We saw this beginning to happen during the regional workshop; we expect to see more of this happen during the August workshop when more teachers are involved. The real excitement will take place when we meet even more of you during the coming year as you are experiencing what takes place in your classroom when you become a part of career education in action.

This Guideline for Awareness is not meant to be a comprehensive list of instructions suggesting how to implement career education in your classroom. However, we have included along with this guide the booklet First Steps: Planning a Career Development Activity in Your Classroom which was prepared by Able Model Program of Northern Illinois University, Dr. Walter Wernick, Project Director.

We have also included a group of lesson plans from other career education projects to let you see the different ways they are being written. Included are lesson plans written by Jerry Mischel and Martha Simpson while they were members of our staff this summer.

The list of suggested activities included may serve as a springboard for writing units of your own. Also included is a list providing the names and address of other projects where you may want to write to get additional curriculum guides and/or lesson plans.

We have received copies of the following which are available to you on a loan basis (following pages):

1. Books
2. Curriculum Guides
3. Publications
4. Simulations Games
5. Lesson Plans

Our staff is actively helping you plan your district workshops and we are pleased that many of you are asking us to participate. During the coming year we will be available to help you further with any of your in-service meetings, faculty meetings, and P.T.A. meetings.

We are planning a newsletter so that we may share ideas among all the participating schools. Career education is a people oriented concept and that includes not only the students, the parents, members of the community, but also all of you teachers out there and all of us here in the regional office anxiously waiting to hear from you and be of service to you.

Sincerely,

Rosemary Mead, Coordinator
Jerry Mischel
Martha Simpson

AVAILABLE MATERIALS

BOOKS:

A Student Survival Manual
One copy

New Curriculum Developments
One copy

View On American Schooling
One copy

Problem Solving To Improve Classroom Learning
One copy

Occupational Information In The Elementary School
One copy

Federal Dollars For Scholars
One copy

CURRICULUM GUIDES:

Vocational Development In The Elementary School
Mid-Hudson Career Development and Infoemation Center
One copy

Dr. Allen B. Moore
Center for Occupational Education
North Carolina State University
P.O. Box 5096
Raleigh, North Carolina 27607

Mrs. Eva M. Pumphrey
Director of Curriculum
Anne Arundel County Public Schools
Box 951
Annapolis, Maryland 21404

Mr. Joel Smith, Director
Cobb County Occupational and Career Dvelopment Program
P.O. Drawer "R"
Marietta, Georgia 30060

Mr. George F. Meyer, Director
New Brunswick's Career Education Program
New Brunswick Public Schools
83 Livingston Avenue
New Brunswick, New Jersey 08901

Mr. David H. Miller
Ohio State University
1900 Kenny Road
Colombus, Ohio 43210

PUBLICATIONS:

"Exploring Classroom Uses Of Simulations"
Simile II
12 copies

"Using Simulations to Teach International Relations"
Simile II
12 copies

SIMULATION GAMES:

Powder Horn
Simile II
One copy

Block'n Score
Simile II
One copy

Import
Simile II
One copy

Explorers I
Simile II
One copy

Explorers II
Simile II
One copy

Roaring Camp
Simile II
One copy

Trade and Develop
Academic Games Associates, Inc.
One copy

Take
Academic Games Associates, Inc.
One copy

Drug Debate
Academic Games Associated, Inc.
One copy

Ghetto
School and Library Department
Western Publishing Company
One copy

Economic System
School and Library Department
Western Publishing Company
One copy

Democracy
School and Library Department
Western Publishing Company
One copy

Life Career
School and Library Department
Western Publishing Company
One copy

Generation Gap
School and Library Department
Western Publishing Company
One copy

Consumer
School and Library Department
Western Publishing Company
One copy

LESSON PLANS

Anne Arundel County
Annapolis, Maryland

Level		
	I	(K-2)
	II	(3-5)
	III	(6-8)
	IV	(9-12)

Career
Self
Society
Economics
Technology

Cobb County
Marietta, Georgia

Grades 1-2
Grooming Services

Grades 4-5-6
The Earth, A Great Depository

Grades 5-6
The Hospital - Careers in Health

Grade 7
Math Works In The Television Industry

Grades 7-12
Occupational Awareness

Grade 10
Interviewing Work Roles

Grades 10-11
You And Your World Of Work

Henderson County
Henderson, Kentucky

Elementary Units For:
SELF
A. Uniqueness
B. Similarities and Differences
C. Interests
D. Interests of Your Own
E. Awareness of Surroundings
F. Ways People Learn
G. Budgeting Time
H. Making Friends
I. Friendship
J. Male-Female Roles

FAMILY
A. Self--As A Member of A Family Unit
B. The Family Trains Its Children
C. Family--Interests and Hobbies
D. Family In The Community
E. The Family Home In The Community
F. The Family Plans A House
G. The Family Builds A Home

TRAVEL
A. Travel By Land
B. Travel By Air
C. Travel By Water

HEALTH
A. Teeth

INSURANCE

OCEANOGRAPHY

LAW ENFORCEMENT

Lincoln County
Hamlin, West Virginia

Level One
A. Wonderful World Of Work
B. Working at Home
C. Family Living
D. Our Business Experience in the World of Work
E. Contributions Toward My Education
F. Our Parents in the World of Work.

Level Two
A. Away We Go
B. What Is A Farmer's Market
C. Clothes of Today
D. Our Home

Level Three
A. Choo Choo Train
B. Workers Within Our Community
C. The Staff of Life
D. Supermarkets Serve People

Level Four
A. Opportunities in Our State
B. Black Gold
C. Rainbow of Color
D. Protective Services Provided by Our State

Newport Ind. School District
Newport, Kentucky

Grades 1-2
"Me and My World"
Unit One - "Me"
Unit Two - "Inside My World"
Unit Three - "Exploring My World"

Pikeville Schools
Pikeville, Kentucky

Kindergarten
Interdependence

First Grade
Family Environment

Second Grade
Neighborhood Environment

Third Grade
City

Fourth Grade
Health Services, Public Utilities, Construction

Fifth Grade
Coal Mining, Government Services, Transportation, Natural Resources

Sixth Grade
Communication; Telephone, Radio, Television, Newspaper, Manufacturing

August 1, 1972

Dear Boys and Girls,

My willingness to leave the classroom took courage: courage to let go of the familiar and work toward the advancement of educational reform in such a way as to make education much more responsive and understandable to you and to the public I seek to serve.

The title of my new job, perhaps, has little meaning to you: Coordinator of Career Awareness in the Regional Career Education Development Project. Briefly, what career education means is an attempt to bring new and meaningful purpose to all of education from kindergarten through graduate school by preparing and equipping you to lead useful and productive lives by having a "salable" skill----a job, that is, by the time you choose to leave school.

"When I grow up, I want a profession that is meaningful and relevant and will provide me with lots of loot."

I chose to do this work in the area called Career Awareness which involves reaching children from kindergarten through the sixth year in school, not only because I want to remain close to you but because I believe that you are the most important link in the whole educational process. Nothing can succeed unless you have first done your job well during the earliest days of your life. I now want to be in a better position to help you achieve this goal.

It hasn't always been easy, trying to make school work interesting. We've had some boring, restless days, haven't we? It hasn't always been easy for you to figure out why parents and teachers expected you to accept piece meal ways of learning reading, writing, and arithmetic, caged in between the four walls of a classroom when you are bursting with energy and ideas of your own. We are now trying to develop a way to make education more lifelike. And one way to do this is to learn facts and skills in a pattern as part of a job. Whether you realize it or not, most of your life, if you're lucky, will be spent preparing for and being involved in the world of work.

Now you don't go about this by leaving school and working right off the bat----preparation is important. Part of that preparation, before even thinking about a specific job as such, means developing a positive self-image and a positive attitude toward work.

What this means is that beginning as early as kindergarten you begin to learn about your own unique personality, abilities, and interest areas. Things like: What makes me happy? What makes me sad? What turns me on? And even some of the greatest philosophical questions of all, such as: Why was I born? Who am I? What am I? You will be learning things like: How can I be useful to myself, to others, the community, my state, and my country?

You will also be learning the relationships between the intellect and the emotions. This, in simple terms, means understanding the important connections between what you think about things and how you feel about things. You will also learn about the importance of making friends, and even more important, how to be a friend because you will see the need for learning how to cooperate and solve problems with others, and how to get help from others. And moreover, you will be learning how to want to do things for other people rather than expecting other people to always be of service to you. This also means that you will learn how to budget your time in school because not only will more be expected of you, but if you catch on to this new way of learning, I'm sure that you will expect more from yourself.

You will find the need to become aware of your day to day activities and know the reasons why they are important. I've always sensed that you naturally understood these things just from watching you at play, whether on the playground or in the classroom, drawing, painting, taking part in plays, role playing, having group discussions. Sometimes I was even dumb enough to be apologetic for our noisy, busy classroom----apologetic because we were having so much fun together.

Now we have some pretty smart people on your side: people like Dr. John Bremer, who believes in open education as a means of opening up education; Dr. Herbert A. Otto, who believes that in childhood somehow, children become lost or submerged in the process of "growing up" because we as adults do not recognize the importance of relating play with work; people like Dr. Sidney Marland, who also believes that before one learns to work, he must first learn how to play.

So you see the early part of your education will include an appreciation for the world of play and fantasy. You will experiment with and learn all kinds of roles, including your role as a family member, the reasons why your parents work, and the appreciation of their work. You will also become aware of all the possiblities of employment and develop an appreciation and respect for all kinds of work. In the process, because you will be encouraged to "play" with these ideas, so to speak, you will also learn to value leisure time and begin forming opinions about a particular life-style which may appeal to you.

Part of this new way of learning, through career education, also means more field trips for you. This is important because we not only know that learning is more efficient and longer lasting when the conditions for it are lifelike but we also want you to see for yourself what people are doing when they work. We want you to meet these people while they are at work, and we also want to give them opportunities to visit with you in the classroom and see how you go about the job of working and learning. Gradually you should get the connection between make-believe jobs for which you will have no potential and the kinds of jobs which will match your own abilities, interests and strengths.

You boys and girls have always done such a good job when we gave you the opportunity to think about careers that now we're beginning to understand why career education should be an integrated part of all your studies. This does not mean adding an additional subject to your courses but that the ideas of career education are to be woven through your courses of study.

This will require some patience, both on your part and on our part. Career education in order to work well is a long, gradual process of attitudinal development. We are learning that no matter what we teach, the approach has to be with you, the students, in mind.

Now part of my job is to spread the good news around concerning career education to school administrators, counselors, teachers, and librarians of our area schools, as well as to members of our communities, because we're involved in this whole thing together, including you, our students.

One of the most important parts of my job is to develop workshops for teachers, who in turn are going to help even more teachers to prepare lesson plans on career education, fusing these ideas into your regular topics of study. I will, of course, encourage the teachers to keep you in mind when they make their plans and help them to realize that you can be a tremendous asset to them when they begin making these plans.

Along these lines, I want to find a way for teachers to have more freedom to experiment, as Dr. Carl Lamar suggests (he's another one of our important people who believes in you); to find more opportunities for discovering the community without, as he puts it, and creating a community within. He wants teachers to have more responsibility for making the program in career education work than they ever had in traditional classrooms. I have been busy gathering materials for these teachers to use in order to help them reach these goals.

Part of these materials involve how to write up goals and objectives in lesson plans; understanding how to go about endorsing a system of accountability through better planning; trying to find ways to measure the performance of both teachers and students.

I am also learning, and plan to demonstrate to teachers the techniques of brainstorming in groups (remember how we liked to do this in our classroom?). I am also learning more about the techniques of group dynamics which we also used in our group guidance sessions in our classroom. I am learning about some new ideas for improving public confidence in public education; how to involve parents, school board members and people in the business world to take a more active part in our classrooms. They all have so much to teach me.

Boys and girls, please invite me to visit with you on occasion when you are actively involved in a project as a result of career education. When I see you again I'll probably have to fight back a few tears, but they will be sparkling, happy tears, knowing that you and your teacher are making career education come to life in your classroom.

Much love,

Rosemary Mead

Rosemary Mead

Guidance Coordinator

Guidelines Teacher

"WHY AM I NEEDED?"

Self-Evaluation Guidelines
for
District Awareness Liaison Coordinator

1. Am I willing to assist the participating teachers in locating materials which would be helpful in integrating the existing curriculum with career education concepts?

2. Am I willing to stimulate and arouse the curiosity of other teachers who have not been exposed to in-service training?

3. Will I be able to arrange a time schedule for meeting with all participating teachers in their district in the Awareness Component to establish:
    a. basic goals and objectives?
    b. a unified plan of action to prevent overlapping?
    c. plans for field trips in such a manner that no particular place will be over-saturated with visitors over a given time period?
    d. a filing system of resource persons to contact in order to utilize their experiences in the classroom?
    e. a filing system of places to visit?
    f. a time for sharing career education experiences used in the classroom?
    g. a time to "iron out" problems?

4. Can I work closely with the Chamber of Commerce and other civic organizations to tap resources in local areas and to keep abreast of the current manpower needs of the community?

5. Am I willing to work closely with the guidance component toward:
    a. involving all children in aspects of career education which are meaningful to the individual child in order to enhance his own self image and his understanding of the world of work?
    b. developing constructive group processes for self-awareness and career awareness experiences?

6. Will I work closely with the Regional Awareness Coordinator?

Self-Evaluation Guidelines
for
Teachers

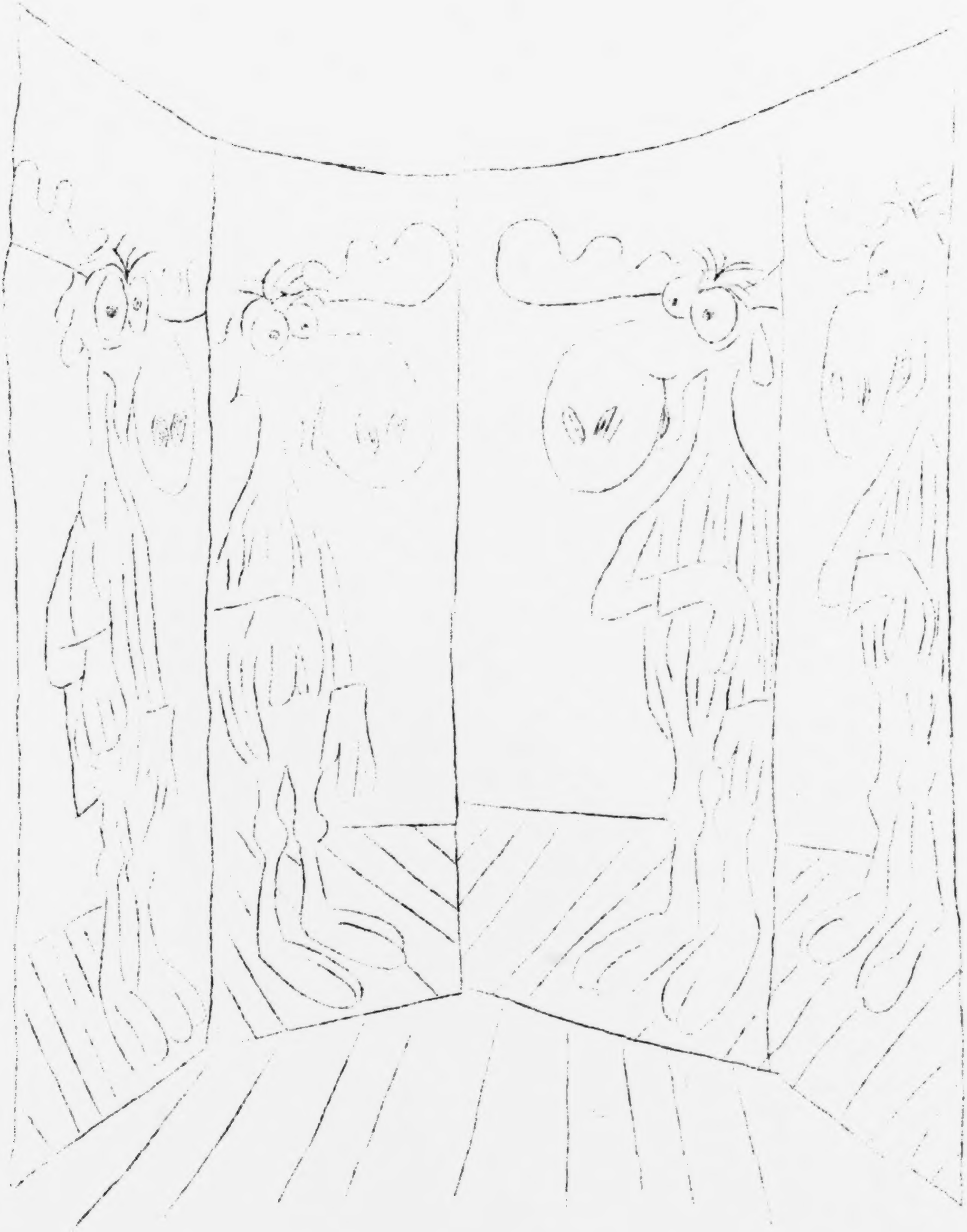
1. Am I willing to cooperate with the district Awareness Liaison coordinator by:
    a. locating relevant materials?
    b. keeping files of ideas to share?
    c. keeping a list of resource persons?
    d. keeping a list of places to visit?
    e. meeting with other teachers in the district?
    f. meeting with parents, inviting them for consultations, as resource people, and keeping them informed on what's happening in the classroom?

2. Am I helping students become aware of the many possible careers and of the development of their self-awareness by:
    a. developing effective ways of integrating career information into the existing curriculum?
    b. assisting in revising the existing curriculum and adopting new materials?

3. Am I willing to work with the librarian in making selections of relevant materials?

4. Am I willing to cooperate with special teachers in their work with career education (music, art, P.E., counselor)?

5. Am I willing to experiment with new ideas which may enhance the career education program?



"IS THIS THE CLUSTER APPROACH?"

TEACHING UNITS

Instructional materials for use by teachers in career education are being developed by a wide variety of commercial publishers. Most of those now in use, however, have been developed at the local level. The following pages include some of these as examples. As you may easily notice no set pattern for writing these units have been formulated. In fact, as Commissioner Marland has recently stated, "Career education is not a do-it-yourself kit that comes boxed, color-coded, and indexed. It is not a program so much as it is a concept to be adapted to the needs of each state or community." (Education Briefing Paper. U.S. Department of Health, Education, and Welfare/ Office of Education. May, 1972)

I like to think of teaching units as being not a lock-step method of painting by numbers, and being careful to stay within the lines, but as a guideline for teachers to experiment with ideas which are effective for their own particular students with the freedom to revise, delete, or expand. The creative teacher, as the artist, plans carefully but the finished product is an on-going process which may or may not end up as originally planned.

Perhaps you may prefer to begin your experiment by trying one of these units (or many others which we have on file) and then revise them according to methods which meet with the greatest amount of enthusiasm for you and your students. The units are meant to be flexible enough to permit you to draw upon your own creativity and to revise or change for your own unique classroom situations.

Otto Mattei, Director of the Bowling Green, Kentucky, Project People, suggests that each unit include six essential components:

1. Visibility (planning, teaching and evaluation)
2. The person in the occupation (an organizing center)
3. Academic relevance
4. Parent communication
5. Management (according to each student's interest and ability)
6. A visible product

The Project People teachers also center their units to include the 15 job clusters suggested by the U.S. Office of Education. This is not a mandatory procedure for elementary teachers but you may prefer to get started in this manner. (See following examples of Occupation Clusters)

Some of you have met Joel Smith, Project Director of the Cobb County Occupational and Career Development Program, Cobb County, Georgia. In the Cobb County program the teacher is required to incorporate into each unit six elements:

1. A hands-on activity to give concrete experience from which abstract ideas can be drawn
2. An all-subject tie-in to show the relationship of math, science, language arts, etc. to the hands-on activity and comparable occupations in the community
3. Visits by resource persons to the classroom to lend credibility and support from the real world
4. Field trips into the business and industrial community to give youngsters a firsthand look at work places and an opportunity to interview workers concerning not only their job duties but also their feelings about their jobs
5. Role-playing to capitalize upon the students' natural desire for such activity while demonstrating occupational characteristics and the need for cooperative effort to reach a common goal
6. Introduction to occupations to aid the students in becoming aware of the vast occupational opportunities available

The Pikeville, Kentucky project, under the direction of Dr. John Jenkins, center their units predominately around the awareness phase of developing a wholesome self-concept. These are excellent units which are available to you from our office.

The Mid-Hudson Career Development and Information Center guide encompasses five broad areas:

1. Philosophical
2. Sociological
3. Psychological-physiological
4. Economic
5. Education

Pat Gibson and Don Newman, Co-directors of the Henderson County Career Education Program believe that the best approach to career education is through integration of subject matter. This can be accomplished by interweaving the various components of career education such as hand-on-activities, field trips, utilization of guest speakers, preparing bulletin boards to enhance the already existing curriculum. They also believe that career education should be life-centered and operate on a conceptual basis. Another way of stating this is that the students would have a working knowledge of the world of work by developing concepts through decision making processes, role playing, simulating experiences; thus, gaining vocational information that will some day be helpful in choosing a career.

They agree that the format or basic design for writing up units vary greatly among teachers and schools. Some elements that are especially helpful in their program include:

1. Concepts to be learned
2. Behavioral objectives
3. Activities for students and teacher
4. Curriculum considerations
5. Resource list which can be either people or things
6. Hands-on activities or experiences
7. Follow up culminating activity
8. Evaluation

One of the best features of career education projects is the willingness of everyone involved to share their materials. As a result I have received many guides and curriculum units and will continue to receive more for distribution. The best part of our regional project will be, of course, when we receive some of the materials which you are currently developing as the result of your own initiative, ingenuity, and imagination.

Rosemary Mead

OCCUPATIONAL CLUSTERS

FOR EASE IN INFORMING STUDENTS ABOUT THE WIDE RANGE OF OCCUPATIONS THEY HAVE BEEN CATEGORIZED INTO FIFTEEN BROAD CLUSTERS. THE LISTING BELOW SHOWS THE SEQUENCE OF ASSIGNED CLUSTERS BY GRADE LEVEL. THE TEACHER IS FREE TO TOUCH ON OTHER CLUSTERS AS WELL.

GRADE LEVEL	ASSIGNED CLUSTER
FIRST	PUBLIC SERVICE, HEALTH OCCUPATIONS
SECOND	BUSINESS OCCUPATIONS, CONSUMER HOMEMAKING AND RELATED OCCUPATIONS
THIRD	HOSPITALITY-RECREATION, PERSONAL SERVICES
FOURTH	MARKETING AND DISTRIBUTION, MANUFACTURING
FIFTH	COMMUNICATIONS AND MEDIA, TRANSPORTATION
SIXTH	MARKETING, ENVIRONMENTAL CONTROL
SEVENTH*	BUSINESS OFFICE, FINE ARTS AND HUMANITIES, MARINE SCIENCE
EIGHTH & NINTH	INDIVIDUAL REVIEW AND EXPLORATION
TENTH, ELEVENTH & TWELFTH	SPECIFIC TRAINING

*BY THE END OF THE SEVENTH YEAR ALL STUDENTS WILL HAVE HAD MINIMAL EXPOSURE TO ALL CLUSTERS.

"TESTING--ONE, TWO, THREE."

Elementary Unit For

Grades 4 - 5 - 6

MONEY MACHINE
Careers in Banking

Prepared by
Jerry Mischel
Staff Assistant
Awareness Componet
Regional Career Education Development Project
Owensboro Extension Center
1501 Frederica Street
Owensboro, Kentucky

NAME: Money Machine

TYPE: Developmental

GOAL: To develop an awareness of the structure of our monetary system.

BEHAVIORAL OBJECTIVES:

1. Student will be able to give a substantial definition of money.
2. Student will be able to relate some of the history of money.
3. Student will be able to identify several different kinds of money.
4. Student will be able to identify and give different substitutes for money.
5. Student will be able to tell the importance of banks.
6. Student will be able to elaborate upon;
    a. National Bank
    b. State Bank
    c. Local Bank
    d. Federal Reserve
    e. Saving Bank
    f. Trust Companies
7. Student will be able to demonstrate how;
    a. To write a check
    b. To fill out a deposit slip
    c. To fill in a check stub
    d. To endorse a check
    e. To fill out savings account application
    f. To figure interest on savings
8. Student will be able to name four bank occupations and the obligations of each.

CLASSROOM MATERIALS:

paper
pencils
encyclopedia
tape - masking, scotch
poster board
chart tablet
ditto paper
felt tip marker
money kit
construction paper
straight pins
letter stencils
ditto stencils

PROCEDURE:

1. Make large posters of a penny, nickel, dime, quarter, one dollar bill, five dollar bill, ten dollar bill, twenty dollar bill, fifty dollar bill, and a hundred dollar bill. Hang around the room to create curiosity and interest.

2. Ask the boys and girls the following questions?
    a. Do you notice anything different about your classroom?
    b. Under what general name do we give to a penny, nickel, dime, etc. (point to each)?
    c. How many of you boys and girls have some money in your pockets and purses?
    d. Why do we need money?

e. How many of you have ever spent some money bo buy something (let students tell of things they have bought with their money)?
f. How many would like to know more about money and our monetary system?

At this point some of your boys and girls may wish to tell how they earn money, let them do so. Be sure that all students participate in the class discussion and make each child feel that he has made a contribution to the class doscussion.

3. Show filmstrip -- Money -- (Appendix A). Discuss this filmstrip with the entire class.

4. Have library books (one per student) on display in your classroom dealing with Money, Banking, etc.. Let your students look through these books when they want. (A list of books which can be used are found in Appendix B).

5. Divide the class into six groups to focus their attention on the overall aspects of the monetary system: (Social Studies)
    a. Definition of money
    b. History of money
    c. Kinds of money (Have student who collects coin to bring and talk about them to the class).
    d. Value of money
    e. Subsititutes for money
    f. Importance of banks

Answers to the above six groups can be found in the books that you have gathered for your students and also the encyclopedia. One class period should be sufficient time for each group to research their topic. Have each group to place the information which they have gathered on large chart tablets. The next day or is possible the same day have each group report their findings, by use of their charts, to the entire class. Each boy and girl should feel free to exchange information and ideas which they have gathered and formed during their research.

6. Discuss the following in terms of money (be sure to let each pupil express his ideas and opinions freely):
    a. Trading or exchange of goods and services. (Math & Social Studies)
    b. Saving of money for a time when it is needed. (Math & Social Studies)
    c. Borrowers, pay back what they borrow plus interest. (Math)
    d. Understanding the total worth of an item. (Math)

Make sure that your students grasp the ideas above.

7. Ask your class; Where does money come from and how it it made? The book, Let's Go To The U.S. Mint, or any encyclopedia dealing with Money or U.S. Mint are helpful in answering the above question. Have a large chart tablet on hand, on which to write down key phrases or ideas of the students. Show film, "United States Treasury" (Appendix C).

8. Show the filmstrip -- Banks -- Appendix A. Discuss the filmstrip with the entire class.

9. Divide class into six groups to research and report back to the class on the following topics:
    a. National Bank
    b. State Bank
    c. Local Bank
    d. Federal Reserve

Social Studies

e. Savings Bank
f. Trust Companies

Answers to the above six groups can be found in the books that you have gathered for your students and also the encyclopedia. One class period should be sufficient time for each group to research their topic. Have each group to place the information which thry have gathered on large chart tablet. The next day or if possible the same day have each group report their findings, by use of their charts, to the entire class.

10. Teach the children the proper procedures for and simulate each of the following:
    a. Writing checks
    b. Filling out deposit slips
    c. Check stubs
    d. Endorsement of checks

Worksheets for the above activities can be found in Appendix E. Emphasize the necessity of keeping accurate records. (All of the above activities can be related to Math).

11. Teach the children the proper procedure for and simulate the following:
    a. Savings accounts - application
    b. Deposit slips
    c. Passbook

Worksheets for the above activities can be found in Appendix F. Emphasize the necessity of keeping accurate records. (All of the above activities can be related to Math).

12. Show the filmstrip -- Banks and Banking -- Appendix A. Discuss this filmstrip with the entire class.

13. Invite different resource persons, Bankers or any occupation related to banking, to come to your classroom to talk about the different types of banking occupations and to answer questions of the boys and girls. Try to obtain a parent of one of your students, as the resource person, as to get the parents of your students involved with career education in your classroom. "A Communicate And Involve The Parents," prepared by Dr. Walter Wernick; director of ABLE Model Program; Northern Illinois University, includes a letter to and also a questionnaire for which to gather information about occupations of parents of your students. This information will be of value to you throughout the entire school year (Appendix D).

14. Discuss the following Bank occupations and obligations of each with your class:
    a. Teller
    b. Loan Department
    c. Saving Department
    d. Guard
    e. etc.

Make each child feel that he has made a contribution to the class discussion.

15. Show film -- Fred Meets A Bank -- (Appendix C). Plan a fieldtrip to a local bank so that your students can visit its many different areas and departments. Let the children interview the employes of and observe their various activities (Language Arts). Interviews should be well planned with a questionnaire developed before the interview so that all pertinent questions are covered.

16. Plan and start a savings account for each child if possible.

17. When the class returns from the fieldtrip discuss the types of activities that the students saw and observed. Have all write up their interviews and place then where they can be seen by all. Have individual students report on their interviews.(Language Arts). Also have children write thank you letters to the bank (Language Arts).

18. Create a bank in your classroom. Let the students role play the different occupations of bank personnel:

a. Cashier
b. Sorting clerk
c. Machine operator - bookkeeping
d. Accounting clerk
e. Stenorgrapher
f. etc.

Simulate writing checks, deposit slips, withdrawals, open savings accounts, figuring interest on savings, etc.. Switch occupations ever so often as to give everyone a chance to role play as many different occupations as possible.

19.Have students create a bulletin board depicting the majority of occupations of banking related to the world of work.

20. Have each child write a paper to be presented to the class entitled, "Who Do I Want To Be In The Money Machine". Place all papers on or around the bulletin board created by your students.

EVALUATION: Tests For Learning
Test before teaching. This is a good rule at any time, for then you can begin where the children are and proceed from there. Before beginning a study, construct a brief test consisting perhaps of 15 true or false items. Check the answers to guide you in your presentation of information. These scores are not recorded, but serve only to point up areas which need further study. After the study has been completed give the students the same test again. Let them compare the answers they gave on the two tests. Where answers differ, ask them to give a reason for the change in answers.

Taken form: Tiedt, Sidney W. and Iris M. Tiedt
Elementary Teacher's Complete Ideas
Hand, Englewood Cliffs, N.J.
Prentice - Hall, Inc. 1965, p. 191.

Appendix A

Filmstrips

Eye Gate 1971
143 B -- "Banks"
Intermediate

Eye Gate 1972
178B -- "Money"
Intermediate

Eye Gate 1972
178D -- "Banks and Banking"
Intermediate

Appendix B

Library Books

Rees, Elinor
Banking
Melmont 1959

Sootin, Laura
Let's Go To A Bank
Putnam's 1957

Wilcox, Louisek
What Is Money?
Steck Co. 1959

Kane, Elmer R.
Banks And Banking
Benefic Press 1966

Tarshis, Barry
Barter, Bills, And Banks
J. Messner 1970

Boehm, David Alfred
Coinmetry
Sterling Pub. Co. 1958

Cooke, David Coxe
How Money Is Made
Dobb 1962

Elkin, Benjamin
The True Book Of Money
Childrens Press 1960

Gelinas, Paul J.
The How And Why Wonder
Book Of Coins And Currency
Grosset 1965

Hine, Al
Money Round The World
Harcourt, Brace & World 1963

Kane, Elmer R.
How Money And Credit Help Us
Benefic Press 1966

Neal, Harry Edward
Money
Messner 1967

Russell, Solveing Paulson
From Barter To Gold
McNally 1961

Witte, Eva
The Adventure Book Of Money
Capitol Pub. Co. 1956

Buehr, Walter
Treasure
Putnam 1955

Rosenfield, Bernard
Let's Go To The U.S. Mint
Putnam 1960

Campbell, Elizabeth Anderson
Nails To Nickels
Little, Brown 1960

Browin, Frances
Coins Have Tales To Tell
Lippincott 1966

Appendix C

Films

UNITED STATES TREASURY
10 min.. Tells story of paper money form the time it is first designed until it is old and worn and ready to be destroyed.

Teaching Film Custodians, Inc.
25 W. 43d Street
New York 17, N.Y.

FRED MEETS A BANK
11 min.. Tells about the bank and its functions. Explains how a check is handled, a savings account opened, safety deposit box used, and other functions.

Coronet Instructional Films
Coronet Bldg.
Chicago 1, Ill.

Appendix D

Communicate And Involve The Parents

SCHOOL ______________________ GRADE _______ TEACHER _____________

Dear Parents,

As a part of our regular instructional program, we would like parents to come to our class and tell the students about their occupations. Our children will benefit by contact with an adult who is contributing to himself and his society. We are sure they will have many important questions to ask.

Please fill out and return this form. You will be contacted to arrange a definite time and date. The general objectives of the program and suggestion for the things we would like to know about will be available. We are interested in all occupations.

- -

Please return to the teacher.

Name ________________________________ Phone _______________

Address ____

Occupation ____

Company or Firm ____

It would be most convenient for me to be at your school on (days and times).

____

____

____

____
Signature

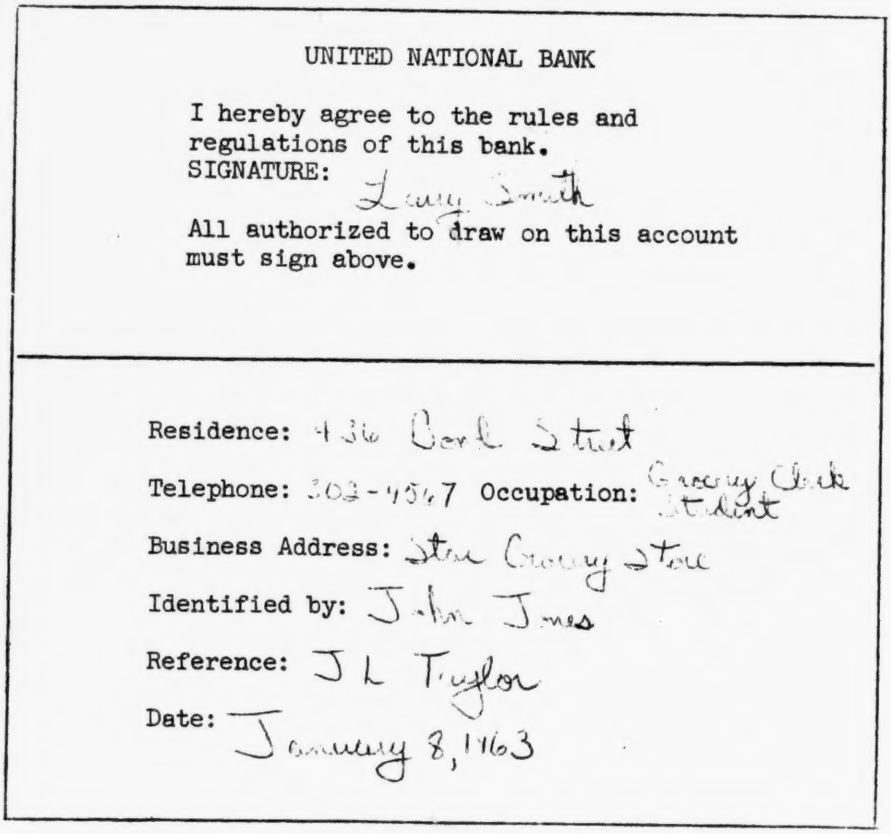
Appendix E

A Checking Account

Larry had saved some money from his job and he decided to open a checking account at the bank. He knew that this would help him in many ways.

When Larry told the man at the bank that he wished to put his money into a checking account, the man told Larry that he would have to fill out a signature card. The signature card helps the bank make certain who has signed the checks.

Here is what the card looked like after Larry filled it out:



UNITED NATIONAL BANK

I hereby agree to the rules and
regulations of this bank.
SIGNATURE: Larry Smith
All authorized to draw on this account
must sign above.

Residence: 436 Park Street

Telephone: 302-4567 Occupation: Grocery Clerk Student

Business Address: Star Grocery Store

Identified by: John Jones

Reference: J L Taylor

Date: January 8, 1963

This card remains in the bank to be used in the future for comparison with signatures on chicks and other business papers.

Appendix E

A Checking Account

After Larry had filled out the signature card, he was given another slip of paper to fill out. The teller told him that this was a deposit slip. This must be filled out when you put money into the bank. Here is a picture of a deposit slip.

UNITED NATIONAL BANK Deposited by Larry Smith		
Hayward, Calif. Please list each check sep.		
Currency	$15	00
Silver	7	75
Checks as follows		
11-6	6	15
93-41	4	32
72-305	1	63
Total	$42	85
See that all checks and drafts are enclosed.		

Larry had to sign his name and fill in the date. Then he wrote down the amount of money that was to be deposited.

After the word Currency, Larry wrote down how much paper money he had. He had a $10 bill and five $1 bills, so he wrote $15.00 on the slip.

After the word Silver, Larry wrote down how much he had in coins. He had $7.75.

Larry had three checks to put into the bank. The numbers that he listed were found on the checks. Sometimes the name of the bank is used instead of the numbers. This shows what bank will cash the check. When all Larry's money was added, he wrote down the sum after the word Total.

A Checking Account

Here are some practice exercises about deposit slips. See how well you can do them.

Find the total of the following figures:

1.

Silver	$13.63
Currency	33.00
Checks:	
Farmers' Bank	7.66
Merchants' Bank	9.44
Hayward Bank	11.61
Total	

2.

Currency	$107.00
Silver	36.36
Checks:	
30-16	1.57
8-41	7.06
Total	

Find the following totals as quickly as possible:

3. $7.00
6.00
4.00
3.00
1.00

4. $ 9.00
6.00
4.00
7.00
11.00

5. $13.00
6.00
4.00
5.00
13.00

6. $12.61
3.47
2.00
5.41
4.26

7. $266.42
104.13
21.36
54.04
21.07

8. $ 5.41
3.67
13.00
5.46
9.32

9. $3.00
5.00
6.00
7.00
8.00

10. The following change was taken to the bank: 37 pennies, 23 niclels, 13 dimes, 12 quarters, 7 half dollars, and 4 silver dollars. What was the total amount deposited? ______________________

11. Larry made the following deposits at his bank: $13.76 in coins, $43.00 in currency, and $23.74 in checks. What was his total deposit? ______________________

A Checking Account

After Larry had filled out his deposit slip, the teller at the bank gave him a checkbook and showed him how to use it.

Each page of the checkbook is made up of two parts. The smaller part is called the check stub. This should be filled out first. Then you will have a record of each check that you write. The stub tells the date of writing the check, how much money the check is for, to whom it is written, and what it is being spent for. It also shows you your balance (how much money you still have in the bank).

Here is a picture of a check stub.

No. 42 $ 13.47
[illegible] 14 19 63
To Bill Brown
For [illegible]
Bal. Bro't. For'd. 32.50
Am't. Deposited ______
Total ______
Am't. This Check 13.47
Bal. Car'd. For'd. 19.03

No.--Number. This shows the number of checks you have written.

$--You write the amount of the check in this space.

____19____--This is for the date.

To--Write the name of the person to whom you are writing the check in this space.

For--Tell what the check is being spent for.

Bal. Bro't. For'd.--Balance brought forward. This shows the amount of money you have in the bank. (Always fill this in on the next new page after you write a check.)

Am't. Deposited--If you are putting more money into the bank, write the amount deposited in this space.

Total--Add amount deposited to balance brought forward.

Am't. This Check--Write down the amount of the check you are writing.

Bal. Car'd. For'd.--Balance carried forward. Find this by subtracting the amount of the check from the total.

A Checking Account

After Larry had filled out his deposit slip, the teller at the bank gave him a checkbook and showed him how to use it.

Each page of the checkbook is made up of two parts. The smaller part is called the check stub. This should be filled out first. Then you will have a record of each check that you write. The stub tells the date of writing the check, how much money the check is for, to whom it is written, and what it is being spent for. It also shows you your balance (how much money you still have in the bank).

Here is a picture of a check stub.

No. 42 $ 13.47
[illegible] 14 19 63
To Bill [illegible]
For [illegible]
Bal. Bro't. For'd. 32.50
Am't. Deposited ______
Total ______
Am't. This Check 13.47
Bal. Car'd. For'd. 19.03

No.--Number. This shows the number of checks you have written.

$--You write the amount of the check in this space.

_____19____--This is for the date.

To--Write the name of the person to whom you are writing the check in this space.

For--Tell what the check is being spent for.

Bal. Bro't. For'd.--Balance brought forward. This shows the amount of money you have in the bank. (Always fill this in on the next new page after you write a check.)

Am't. Deposited--If you are putting more money into the bank, write the amount deposited in this space.

Total--Add amount deposited to balance brought forward.

Am't. This Check--Write down the amount of the check you are writing.

Bal. Car'd. For'd.--Balance carried forward. Find this by subtracting the amount of the check from the total.

Appendix E

A Checking Account

1.

No. ______________ $ ______

______________19______

To ______________________

For ______________________

Bal. Bro't. For'd. ________

Am't. Deposited __________

Total ______________

Am't. This Check _________

Bal. Car'd. For'd. ________

Larry started to fill out a check stub for his fourteenth check on May 6. The amount of the check was $7.13. When Larry looked at the check stub he saw that the balance brought forward was $37.53 and that he had deposited $5.00. This check was written to the Star Shoe Store for a pair of shoes he was buying. Fill in the check stub correctly.

2.

No. ______________ $ ______

______________19______

To ______________________

For ______________________

Bal. Bro't. For'd. ________

Am't. Deposited __________

Total ______________

Am't. This Check _________

Bal. Car'd. For'd. ________

Larry wrote his fifteenth check to Bill's Service Station when he had his car greased. The check was for $4.75. His balance brought forward was found on check stub 14. He made no deposits. Larry wrote this check on May 7. Fill in the check stub properly.

3\.

No. ________________ $ _____

____________________19_____

To ________________________

For _______________________

Bal. Bro't. For'd. ________

Am't. Deposited ___________

Total ____________

Am't. This Check __________

Bal. Car'd. For'd. ________

Larry's sixteenth check was written on May 10. He wrote a check for $13.14 to Smith's Sport Shop for a basketball. His balance brought forward was $30.65, and he had deposited $3.25 that morning. Fill in the check stub correctly.

4. What was the total amount of all three checks? ____________________

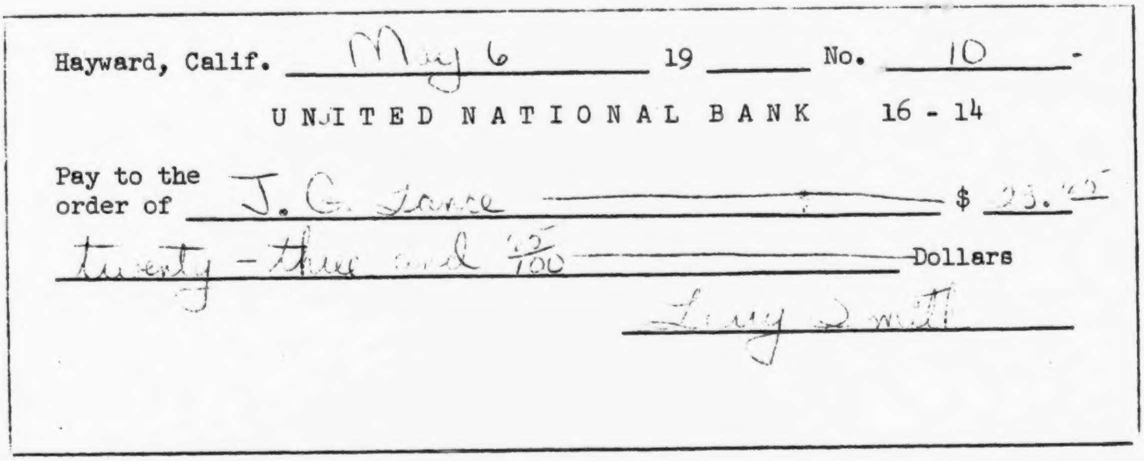
5. How much did Larry deposit altogether? ____________________

Appendix E

A Checking Account

After the check stub is filled out, you must fill out the check itself. This should always be done carefully and neatly, so that no one can change it in any way.

Here is a picture of a check.



Hayward, Calif. May 6 19 ______ No. 10

UNITED NATIONAL BANK 16 - 14

Pay to the order of J. G. Lance $ 23.65

twenty-three and 65/100 Dollars

Larry Smith

This check has been correctly filled out. It states that:

1. The money is to be paod to J. G. Lance. He is called the payee of the check.

2. Larry Smith is writing the check. He is the drawer, and the check must have his signature. The drawer is sometimes called the maker of the check.

3. The amount to be paid to Mr. Lance is $23.65. In how many ways is this shown? ______________ The amount is sometimes called the face of the check.

4. The date of the check is May 6, 1963.

5. The check is the tenth that has been drawn.

6. The check is drawn on the United National Bank, where Larry has his account.

Appendix E

A Checking Account

The bank gave Larry a list of ten useful rules for writing checks. Read them over carefully. Explain why each is important.

1. Always use ink in writing a check. Write clearly and neatly.

2. Be sure to date the check properly.

3. Cover all the blank spaces with words, numbers, or lines.

4. Write the amount in figures close to the dollar sign.

5. In writing the amount in figures, write the number of cents smaller than the number of dollars and draw a line under them.

6. Write the amount in words so that it completely fills the space.

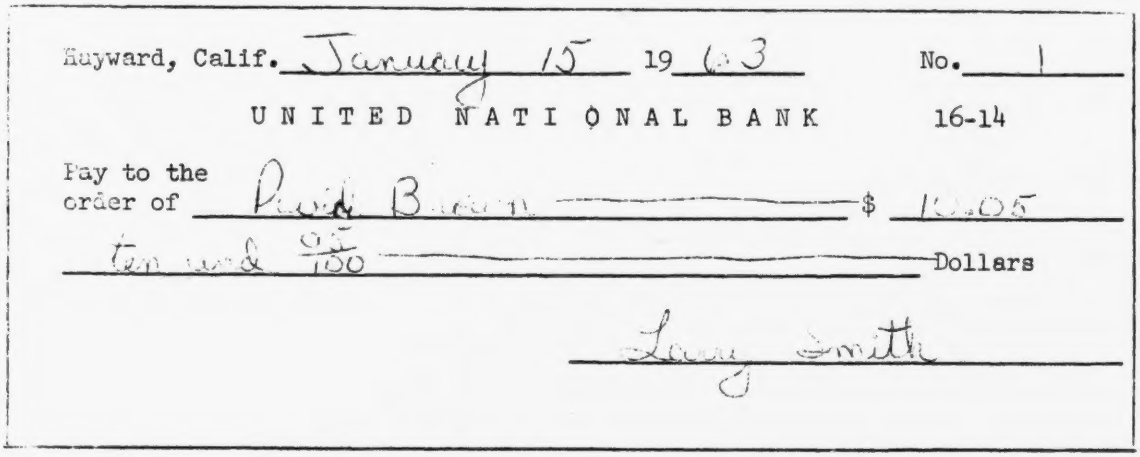
7. Never write a check for an amount greater than the balance in your checking account.

8. Sign your name exactly as it is on your signature card.

9. Never erase or change words or figures. Destroy the check if you make a mistake, and write a new one.

10. If a check is lost or stolen, ask the bank to stop payment on it.

Here is the first check Larry drew. Which rules did he fail to follow?



Hayward, Calif. January 15 19 63 No. 1

UNITED NATIONAL BANK 16-14

Pay to the
order of David Brown —————— $ 10.05

ten and $\frac{95}{100}$ —————— Dollars

Larry Smith

A Checking Account

No. 3 $ 6.04
February 19 63
To James Hogan
For Tennis Racket
Bal. Bro't. For'd. 109.82
Am't. Deposited ____
Total ____
Am't. This Check 6.04
Bal. Car'd. For'd. 103.78

Hayward, Calif. February 19 63 No. 3

UNITED NATIONAL BANK

Pay to the order of James Hogan — $ 6.04

six and $\frac{04}{100}$ Dollars

Larry Smith

The following questions refer to the check and check stub show on this page.

1. Who is the payee of the check? ____
2. Who is the drawer of the check? ____
3. What is the face of the check? ____
4. At what bank will the money be payed? ____
5. What balance did Larry have before he prepared this check? ____
6. What balance did Larry have after he prepared this check? ____
7. How much had Larry deposited, according to the check stub? ____
8. On what date was this check written? ____
9. For what purpose was this check written? ____
10. How much money did Larry have in the bank after he made his deposit?

____

11. In how many places do you see the amount of this check? ____
12. Why should Larry prepare the stub? ____

____

A Checking Account

If someone makes out a check to you, you can cash it, deposit it in a savings or checking account, or use it like money. In any case you will have to endorse (sign your name on) the check. To do this, turn the check over and write whichever of the endorsements shown below is right for what you want to do with the check.

Endorsement in blank-- Be sure to sign your name exactly as it appears on the face of the check. When a check is endorsed this way anyone can cash it if he also endorses it. Endors the check only when you are ready to cash it.

Larry Smith

Endorsement in full--Now John Doe must endorse the check before anyone else can cash it. Larry can now show that he has given the value of the check to John Doe.

Pay to the order of
John Doe
Larry Smith

Restricted endorsement--This endorsement is used when you want the check to be used only for a definite purpose.

For deposit only
Larry Smith

Kahn, Charles H. and J. Bradley Hanna
"A Checking Account"
Using Dollars And Sense
Fearon Publishers 1963

Kahn, Charles H. and J. Bradley Hanna
"A Checking Account"
Using Dollars And Sense
Fearon Publishers 1963

A Savings Account

In order to start a savings account, you must fill out an application blank. Look at the application blank below and see if you can fill it out.

CENTRAL NATIONAL BANK
SAVINGS ACCOUNT

Name ______________________________

Address ______________________________

City ______________ Telephone ______________

Occupation ______________ Birthplace ______________

Mother's Maiden Name ______________________

You may deposit any amount of money you wish. When you put your money into a bank, you receive interest on your savings as long as you keep them there. Remember to save regularly.

CENTRAL NATIONAL BANK
SAVINGS ACCOUNT

Account No.

Name ______________

Date ______________

Have you changed your address?

New address: ______________
Zone no. ______________
State ______________

Cash ______________

Checks 1 ______________
2 ______________
3 ______________
4 ______________
5 ______________

Total deposit ________

When you make a savings deposit, you fill out a special deposit slip used for savings accounts. You give the slip and your passbook to the bank teller. He keeps the slip, records the deposit in your passbook, and returns the passbook to you. (A passbook is a small book, like a diary, in which you keep a record of the money you have in the bank.)

When you deposit chicks, you must list each one separately.

A Savings Account

Here are some problems. Fill in the deposit slips on the following pages.

1. John Smith wanted to deposit some money in his savings account. He had $37.16 in cash. He also had three checks--one for $3.17, one for $5.40, and one for $17.23. Complete deposit slip No. 1.

2. Charles Brown brought some money to the bank to deposit in his savings account. He had $109.72 in cash and five checks. The checks were for $3.36, $5.40, $31.62, $93.71, and $25.00. Fill out deposit slip No. 2 for him.

3. James Greene had $36.00 in cash to deposit in his savings account. Fill out slip No. 3 for him.

4. Bill Anderson wished to deposit some money in his savings account. He found he had three $5 bills, two $10 bills, one $20 bill, seven $1 bills, and $ .35 in change. He also had two checks, one for $7.36 and one for $13.63.

5. Deposit for James Noel: Cash--$17.93
   Checks--$13.26, $36.01

6. Deposit for Henry Misor: Cash--$6.73
   Checks--$31.06, $54.21, $16.97

Appendix F

1.

CENTRAL NATIONAL BANK
SAVINGS ACCOUNT

Account No.

Name ____________________

Date ____________________

Have you changed your address?

New address: ________________
Zone no. ____________________
State _______________________

Cash ________________________

Checks 1 ____________________
2 ____________________
3 ____________________
4 ____________________
5 ____________________

Total deposit ___________

2.

CENTRAL NATIONAL BANK
SAVINGS ACCOUNT

Account No.

Name ____________________

Date ____________________

Have you changed your address?

New address: ________________
Zone no. ____________________
State _______________________

Cash ________________________

Checks 1 ____________________
2 ____________________
3 ____________________
4 ____________________
5 ____________________

Total deposit ___________

3.

CENTRAL NATIONAL BANK
SAVINGS ACCOUNT

Account No.

Name ____________________

Date ____________________

Have you changed your address?

New address: ________________
Zone no. ____________________
State _______________________

Cash ________________________

Checks 1 ____________________
2 ____________________
3 ____________________
4 ____________________
5 ____________________

Total deposit ___________

4.

CENTRAL NATIONAL BANK
SAVINGS ACCOUNT

Account No.

Name ____________________

Date ____________________

Have you changed your address?

New address: ________________
Zone no. ____________________
State _______________________

Cash ________________________

Checks 1 ____________________
2 ____________________
3 ____________________
4 ____________________
5 ____________________

Total deposit ___________

Appendix F

5.

CENTRAL NATIONAL BANK
SAVINGS ACCOUNT

Account No.

Name ____________________

Date ____________________

Have you changed your address?

New address: ________________
Zone no. ___________________
State ______________________

Cash _______________________

Checks 1 __________________
2 __________________
3 __________________
4 __________________
5 __________________

Total deposit ____________

6.

CENTRAL NATIONAL BANK
SAVINGS ACCOUNT

Account No.

Name ____________________

Date ____________________

Have you changed your address?

New address: ________________
Zone no. ___________________
State ______________________

Cash _______________________

Checks 1 __________________
2 __________________
3 __________________
4 __________________
5 __________________

Total deposit ____________

Kahn, Charles H. and J. Bradley Hanna
"A Savings Account"
Using Dollars And Sense
Fearon Publishers 1963

WORLD OF WORK RESOURCES

THE BANK OCCUPATIONS
(Teller, Billing Clerk, Loan Office, President)

Prepared by
ABLE
Model Program
Northern Illinois University
DeKalb, Illinois 60115

THE WORLD OF WORK

ACCESSIBILITY: What materials and services can be available to the learner.

MOBILITY: What content areas (skills, facts, attitudes, etc.) emerge from this idea?

ACCOMPLISHMENT: What can the learners do?

TELLER

ACCESSIBILITY	Teller Currency Checks Bank forms Saving account books Library materials (including films, filmstrips, tapes, etc.)
MOBILITY	Customer relations Procedures of withdrwaing and depositing money Checking accounts Saving accounts Proper use of checks Mathematics (arithmetic processes, computation of interest, etc.) Currency - past and present Currency - foreign Types of checks (traveler's checks, personal, payroll) "Quality control" precedures in processing checks and money
ACCOMPLISHMENT	Roleplay teller and customer transacting business Roleplay cashing a check (traveler's check, etc.) Bulletin board describing the different types of currency Chart illustrating currency - past and present Explain the different types of checks (oral, written) Dramatize security procedures in case of holdup Discuss what could be used in place of money Write reports on history of banking

BILLING CLERK

ACCESSIBILITY	Clerk in billing department Billing deparment in bank Bank forms Bank statements Library materials
MOBILITY	Concept of interest Mathematics (computing interest, balances) Terminology within work stations Procedures and machines to increase productivity (addressing, mailing) Accounting procedures Computer "language"
ACCOMPLISHMENT	Compute: a. balance of savings accounts b. interest on amounts for varying lengths of time Explain information found on bank statements Explain purpose and operation of machines in billing department Write reports regarding use (and misuse) of checking accounts Roleplay telephone calls between customer and billing clerk about bank balance Write interview with clerk for news article in class journal Compare clerk's job with the job of school secretary

LOAN OFFICER

ACCESSIBILITY	Loan officer Loan applications Bank forms Bank Library materials
MOBILITY	Economics of capitalism (credit, loans, capital) Development of the concept of loans Duties and responsibilities of lean officers Different types of leans (mortgages, farm loans, home improvements, business) Procedures involved in applying and obtaining a loan Methods of payment of loans Government regulations of leans Loan companies Computation of interest
ACCOMPLISHMENT	Roleplay loan officer and customers applying for loans Explain reasons for refusing to grant loans Illustrate different types of loans in chart form Write reports describing the process applying for a loan Set up a bulletin board describing the development of the concept of loans Write compositions on "What I would (and would not) borrow money for" Compare purposes and operations of banks and other loan agencies Discuss the role of government agencies in making money available

PRESIDENT

ACCESSIBILITY	President Bank Office of Secretary of State, State of Illinois American Banking Association banking kit Library materials
MOBILITY	Duties of executives (management, decision-making) Internal operations of a bank Development of trade and money History of banking (variety of banks) Government regulations The Federal Reserve System Security arrangements Community services (public relations)
ACCOMPLISHMENT	Draw pictures of a bank's different operations Write reports describing the duties of the president and other executives Roleplay the bank president with other bank employees Explain organizational chart illustrating the management of a bank Chart illustrating the development of materials used as money Chart illustrating the community services of local banks (bond issues, etc.) Set up a bulletin board illustrating critical incidents in the history of banking Write reports describing government regulations of a bank Discuss the Federal Reserve Banking System (interest rates, etc.)

Elementary Unit for

Grades 4, 5, 6

THE EARTH, A GREAT DEPOSITORY

Initial Development:

Barbara D. Ambrose

Bells Ferry Elementary School

COBB COUNTY OCCUPATIONAL AND CAREER DEVELOPMENT PROGRAM

Joel Smith - Project Director

Robert Cook - Career Development Specialist

Albert Price - Career Development Specialist

Judy Comer - Curriculum Writer

422-9171 Ext. 246

P. O. Drawer 'R'

Marietta, Georgia 30000

GENERAL INTRODUCTION

Career Development elementary units are an attempt to involve all youngsters in an approach to total education. Not only does the unit approach emphasize the relation of subject matter to the community outside the school, but also it seeks to introduce students to different career clusters found in that community. In addition, this approach stimulates self evaluation by youngsters; that is, each student becomes more aware of himself in terms of strengths, weaknesses, abilities, likes and dislikes, etc. Implementation of the Career Development approach will also offer decision-making practice for youngsters and will encourage active participation of all students to the extent of individual capabilities.

Six elements form the base for the Career Development method -- resource persons, field trips, role playing, occupational awareness, subject matter tie-in and manipulative activity. Through the relation of subject matter to different occupational areas, student learning skills are strengthened and awareness of characteristics is increased. A field trip provides younsters the chance to see workers in their work environment, utilizing the "school subject" skills, knowledge and information appropriate to that role. Classroom resource persons also provide students with first-hand knowledge as they share job feelings, information and interests and answer student questions. By role playing various occupations in the unit study, students gain personal insight into that job and are able to experience some of the actual responsibilities, duties and feelings associated with that work role. The final element, the hands-on activity, attempts to unite the other elements in an activity that closely approximates the characteristics of the career cluster being studied, thus allowing youngsters to put their classroom academic skills and occupational information into actual practice.

INTRODUCTION

Our earth is a great storehouse of treasures as it contains: rocks and minerals, water supplies, soil, chemicals, the history of the earth in its rocks and escavations, unbelievable rock structures, and its wealth of beauty. It provides job opportunities for millions of people. It affects history as people migrate, engage in warfare and struggle to obtain a large portion ot its wealth to make life easier.

*This unit expands the concepts of 5A Science in our new curriculum guides.

I. Objectives and Concepts

A. Objectives

1. General
    - a. To help the children learn that there are many jobs and occupations to be found allied with the treasures of the earth.
    - b. To help the children learn how to investigate, research, and report their findings to others.
    - c. To learn how to work cooperatively in small group situations.
    - d. To learn about the treasures of the earth in the child's community, state, and nation.
    - e. To learn how to really "see" that which they are exposed to in field trips, audio-visual aids, and exhibits.
    - f. To learn how to plan and complete tasks.
    - g. To really see the beauty in one's environment.

2. Behavioral Objectives
    - a. Given a group of ten (10) rocks, the students will be able to classify them under the headings, igneous, sedimentary, and metamorphic.
    - b. At the end of the unit, the learner will be able to spell and define at least two-thirds of the unit vocabulary words.
    - c. Each student will be able to identify a minimum of ten (10) occupations related to this field and describe qualifications, preparations and duties of each career.
    - d. Students will be able to identify a minimum of ten (10) rocks by color.
    - e. The students will demonstrate their oral communication skills by making class reports utilizing skills of enunciation, pronunciation, diction, etc.
    - f. At the end of the unit study, students will be able to identify several common rocks, minerals and gems of Georgia.
    - g. The learner will be able to distinguish between precious and semi-precious gems, categorizing several stones into the correct category.
    - h. Students will demonstrate their knowledge of the Moh Scale by writing a brief discussion, including such facts as origination, application, short discussion of ten categories, etc.
    - i. At the end of the unit students will be able to discuss rock and mineral chemical composition and identify a minimum of ten (10) chemical elements and their symbols in the discussion.

j. In a verbal discussion, the learner will be able to describe and demonstrate several differences between rocks and minerals.
k. Students will be able to discuss in written form, patterns to volcanic activity, describing the various stages and distinguishing between quiet and explosive volcanic actiivity.
l. After the unit, the student will be able to identify samples of lava and volcanic ash among other rocks in a collection with 75% accuracy.

B. Concepts

1. All rocks belong to three groups: igneous, sedimentary, and metamorphic.
2. Some rocks are hard and some are soft.
3. Rocks are made of many minerals.
4. A rock that contains one material is called a mineral.
5. Granite is one of the most plentiful rocks on earth.
6. All rocks have a story to tell.
7. Rocks do not always stay in one place.
8. Hard rocks make good building materials.
9. Many rocks contain useful metals.
10. Some rocks are made by people.
11. People who spend their lives studying rocks and minerals are called geologists.
12. It takes many workers to carry on the jobs allied to the treasures of the earth.

13. Volcanic action is needed to bring plutonic rock to the surface.
14. Most volcanic rock is dark, fine grained, and porous.
15. Rocks that look alike may have different origins.

II. Subject Matter

A. Types of Rocks

1. Igneous
   a. Granite
   b. Basalt
   c. Obsidian
   d. Pumice
   e. Garnet
   f. Topaz
   g. Ruby

2. Metamorphic
   a. Gneiss
   b. Marble
   c. Slate
   d. Quartz

3. Sedimentary
    a. Clay
    b. Coal
    c. Conglomerates
    d. Flint
    e. Limestone
    f. Sandstone
    g. Shale

B. Mineral Lusters

1. Pearly - gypsum
2. Silky - asbestos
3. Glassy - quartz
4. Sparkling - diamond
5. Dull - clay, chalk

C. Moh's Scale

Moh's Scale to test hardness of minerals. The higher the number, the harder the mineral.

1. Talc
2. Gypsum
3. Calcite
4. Fluorite
5. Apatite
6. Arthoclose
7. Quartz
8. Topaz
9. Corundum
10. Diamond

D. Minerals of Georgia

1. Asbestos - Habersham Co.
2. Barite - Cartersville
3. Bauxite - Cartersville, Bartow Co.
4. Corundum - Laurel Creek
5. Gold - Appalachian District
6. Kaolin - Bartow Co.
7. Limonite - Bartow Co.

E. Chemicals

Most rocks and minerals of the earth are made up of the following chemicals:

1. Aluminum - Al
2. Iron - Fe
3. Magnesium - Mg
4. Calcium - Ca
5. Sodium - Na
6. Potassium - K

7. Oxygen - O
8. Silicon - Si
9. Sulfur - S
10. Carbon - C
11. Chlorine - Cl
12. Hydrogen - H

F. Colors of Rocks

1. Sulfur - yellow
2. Gypsum - white
3. Slate - gray
4. Ruby - red
5. Sandstone - pink
6. Quartz - blue
7. Jade - green
8. Obsidian - black
9. Gold - orange

G. Vocabulary

1. Rocks
2. Minerals
3. Mantle
4. Crust
5. Core
6. Igneous
7. Sedimentary
8. Metamorphic
9. Atom
10. Crystal
11. Gem
12. Ore
13. "Tumbler"
14. Pultonic Rocks
15. Geology
16. Meteorology
17. Petroleum
18. Chemistry
19. Quarry
20. Volcanology
21. Gemology
22. Pottery
23. Seismograph

This is just a sampling of careers and jobs available.

H. Workers With the Earth's Resources

1. Geologist
    a. Likes to work in the out-of-doors.
    b. Has a strong general educational background; a college degree; courses in geology, paleontology,

   mineralogy; and other sciences for this division of work and has a background in mathematics.
   - c. Is hired by many petroleum and mining companies.
   - d. Large numbers of geologists are also hired by state and national geological surveys.

2. Jeweler
   - a. May learn his trade as an apprentice.
   - b. A jeweler works in clean, pleasant surroundings serving others.
   - c. Fine jewelers are skilled craftsmen who are able to design jewelry.
   - d. A jeweler may use a saw, file, drill, pliers, soldering irons, and other tools.
   - e. A craftsman works with both precious, semi-precious gems, and many metals.
   - f. A fine jeweler is able to evaluate gems.
   - g. Some jewelers do fine engraving.
   - h. A jeweler needs a strong background in the science, mathematics, art, and shopwork.
   - i. A jeweler must be patient, have good hand-eye coordination, a steady hand, and must like to work with people.

3. Potter
   - a. A potter is a very creative person.
   - b. A potter is appreciated for his work.
   - c. We have many fine potters in Georgia, one being William Gordy of Cartersville.
   - d. A potter works with clay either on a potter's wheel or by hand.
   - e. A potter may learn his trade from a school of art, or as an apprentice.
   - f. A potter likes to work alone.
   - g. A potter makes many items: tiles, dishes, and figures.
   - h. A potter usually uses a kiln to "fire" his pottery.
   - i. A potter's salary depends upon his skill and sales outlet.

4. Meteorologist
   - a. A meteorologist may receive his training as an apprentice or through college training. The more training a meteorologist has the more advancements he is apt to make in government or industrial circles.
   - b. A metorologist must be proficient in the sciences, languages, arts, and math.
   - c. A meteorologist likes to work with people.
   - d. A meteorologist has a very responsible job and has to read charts accurately.
   - e. Men and women may become meteorologists.
   - f. Meteorologist often are out of doors in poor weather and therefore have to have good physical health.

   g. A meteorologist has to be a calm person, one who faces an emergency with equanimity.
   h. A meteorologist today finds he is more and more involved with oceanography and pollution; therefore, he has to take special study of this area.

5. Chemist
   a. The chemist who works with the earth's treasures works in basic chemistry.
   b. Petroleum is one of the most important materials used by these chemists.
   c. The chemist in the basic area also works with limestone, phosphate rock, coal, sulfur, and magnesium from the sea.
   d. The chemist has to have a college degree with many courses in chemistry.
   e. A chemist does most of his work in a laboratory.
   f. A chemist often works with dangerous chemicals.
   g. A chemist may have different job titles: teacher, laboratory technician, consultant, chemical salesman, and others.

6. Volcanologist
   a. A volcanologist has to have a college degree which emphasizes general science, physics, chemistry, geological studies, mathematics, geography, and a good general background of learning.
   b. A volcanologist must be able to interpret charts, graphs, and readings.
   c. A volcanologist must be familiar with seismological studies.
   d. A volcanologist often works alone and sometimes has to travel.
   e. A volcanologist often works for the government or a large university center.

7. Sculptors
   a. A sculptor works with various media: stone, metals, and wire.
   b. A sculptor carves, models, and casts.
   c. A sculptor is creative.
   d. A sculptor, many times, studies under a well-known personage in this field.
   e. A popular sculptor receives vast sums of money for his creations.
   f. A sculptor likes to work alone.

8. Miners (Coal)
   a. A miner must know how to run complicated machines.
   b. A miner must be at least eighteen years of age.
   c. A high school diploma is valuable but not necessary to become a miner.

   d. A miner usually advances with experience and skill.
   e. There are many coal mine workers: superintendents, foremen, and general workers.
   f. A coal miner receives good pay, as most miners are members of a union.
   g. Coal miners receive good pay as there are inherent hazards in the mining industry.
   h. A coal miner must be able to work with others to avoid catastrophe.
   i. A coal miner often works below the earth's surface.

9. Gemologist
   a. A gemologist likes the color, texture, and touch of precious and semi-precious stones.
   b. A gemologist likes to travel to find sources of treasure.
   c. A gemologist spends long hours collecting, polishing, and displaying gems.
   d. A gemologist seldom takes a vacation from his work as rocks and gems are everywhere.
   e. A gemologist often trains himself, in other words his occupation is an outgrowth of his hobby, research and travels.
   f. A gemologist often works alone but likes to share his knowledge with others.

10. Quarry Workers
   a. A quarry worker has to be physically strong and able to work in the out-of-doors.
   b. A quarry worker needs to be intelligent in order to run expensive machinery but does not have to be a high school graduate.
   c. A quarry worker needs to be able to follow directions and work well with others.
   d. A quarry worker, in a nearby quarry, starts work at approximately $2. 31 an hour and may earn up to approximately $3.50 an hour with experience and skill.

III. Motivation

A. Bulletin boards showing people who work with the earth's treasures.

B. Visit a quarry.

C. Read books pertinent to this unit.

D. Read poems and stories about gems.

E. Invite resource people to share their findings with your group.

F. Discuss the content that will need to be studied to fulfill the unit plan.

IV. Study Activities

A. Initial Activities

1. Do research and investigation using own textbooks and library books pertinent to this area.
2. Bring in rock and mineral collections to share and study.
3. Use the suitcase exhibit from the Youth Museum showing common rocks and minerals of Georgia. Let all children see, touch, and investigate each exhibit.
4. Make a collection of books, pictures, and pamphlets for classroom work.
5. Search in books for stories, poems, songs, and writings about the earth's treasures.
6. Start group work where each child will participate and become an expert. Share findings.
7. Plan the direction the unit will take with the class.
8. List workers (and past) allied to this field of study.

B. Research Activities

1. Make rock and mineral collections available for study.
2. Make a mock-up of a still mill and use posters to illustrate various jobs done within the mill itself.
3. Make a scrapbook of activities showing: writings, resumes, pictures, and other work done in this unit.
4. Paint pictures on rocks.
5. Do posters showing: semi and precious stones, hardness tests, and diagrams of oil wells.
6. Make terrariums showing soil erosion.
7. Collect pictures showing various styles in jewelry.
8. Work with a jeweler to find out more about his occupation.
9. Collect and label rocks.
10. Make exhibits of sea shells and label.

C. Correlating Activities

1. Language Arts
   a. Make a vocabulary chart for this unit.
   b. Do research to learn about the workers referred to in this unit.
   c. View a film such as the "Grand Canyon" and do a resume.
   d. Write letters to various agencies and schools to obtain information on jobs and careers.
   e. Read poems and stories about gems.
   f. Write thank-you letters.
   g. Make telephone calls to engage resource people to speak on a subject directly related to our unit.

2. Mathematics
    a. Learn how gems are weighed.
    b. Study a simple seismograph. Learn how to read this instrument.
    c. Learn about the price fluctuation in precious gems.
    d. Learn the value of semi-precious gems found in Georgia.

3. Art
    a. Make and display collections of rocks, gems, and minerals.
    b. Make door-stops and animals using stones.
    c. Polish stones.
    d. Look at a painting of the ocean.

4. Science
    a. Study the chemical composition of rocks and gems.
    b. Learn how archaeologists learn about the early development of the world.
    c. Study types of rock.
    d. Do simple experiments with rocks.

5. Social Studies
    a. Study the early history of man to learn what materials he took from the earth: precious stones, tin, iron, and copper. Locate areas on a map of the world where this occured.
    b. Learn how volcanic action has affected the lives of people.
    c. Learn how the Gold Rush in the United States occured at Dahlonega, Georgia.

6. Music
    a. Tape the sound of a water fall or a tide coming in.
    b. Write a poem about treasures of the earth and put it to music.

D. Culminating Activities

1. Visit an out-of-doors classroom for one day to really feel the importance of our natural resources.
2. On the open classroom day, write haiku, paint pictures, study soil samples, learn about a brook, study variances in growing area, feel the breeze, look at the clouds, and become a part of the enviornment.
3. Make a terrarium.
4. Plant a tree in rich soil.
5. Polish rocks for costume jewelry.
6. Write a paper about 10 workers and their qualifications as studied in this unit.

7. Appraise field trips, resource people, and subject area studied. Discuss.

E. Suggested Field Trip Sites

1. Visit a jeweler.
2. Visit a mine or quarry.
3. Visit the state capital building to learn more about Georgia's rocks and gems.
4. Visit the Tate, Georgia Marble Company quarries.
5. Visit a watch repair man.

F. Suggested Resource People

1. Jeweler
2. Meteorologist
3. Conservationist
4. "Rock Hound"
5. Petroleum Worker
6. Potter
7. Brick Mason
8. Chemist
9. Geologist
10. Artist
11. Gemologist
12. Archaeologist

V. Materials

A. Wood

B. Nails, hammer, saw

C. Scrapbook

D. Paste

E. Colored Chalk

F. Crayons

G. Poster board

H. Construction paper

I. Paint

J. Egg cartons (rock displays)

K. Clay

L. Audio-Visual Aids

- M. Charts
- N. Pictures

VI. Evaluation

- A. Self Evaluation
    1. Have I followed this unit carefully?
    2. Have I allowed the children to help plan our approach and execution of the unit?
    3. Did I help the children to find materials for their research?
    4. Did I help each child to become an active participant in his group?
    5. Have I helped each child to have fun while he is learning?
    6. Did I stay in the background after initial planning?
- B. Observations of the Child
    1. Observe carefully to see if the slow and fast moving child has equal opportunities to win success and approach his capacity to learn.
    2. Watch groups at work, and observe if all are working.
    3. Note advances in academic awareness.
    4. Observe the child whose mother has indicated that she always has hated school. Is there a change in attitude?
    5. Check carefully to find out if tasks are being completed.
    6. Watch for special interests.
    7. Check discussion patterns.
- C. Written Tests
    1. Label characteristics of jobs and careers.
    2. Do a test over vocabulary pertinent to this unit.
    3. List all workers you can think of who work with riches of the earth.
    4. Identify ten (10) rocks.
- D. Oral Tests
    1. Role play various jobs and occupations of this group.
    2. Use panel discussions to acquaint children with the material of this subject area.

VII. Bibliography

A. Buehr, Walter, Volcano! New York: William Morrow and Company, 1962.

B. Esterer, Arnulf, Your Career In Chemistry, New York: Julian Messner, 1964.

C. Heavilin, Joy, Rocks and Gems, New York: The MacMillan Co., 1964.

D. Knight, David, Rocks and Minerals, New York: Franklin Watts, Inc., 1969.

E. Sander, Lenore, The Curious World of Crystals, Englewood N. J.: Prentice-Hall, Inc., 1966.

F. Shephard, Walter, Wealth From the Ground, New York: The John Day Company, 1962.

G. Waller, Leslie, Gems and Rare Metals, New York: Grossett and Dunlap, Inc., 1968.

H. Zim, Herbert, Minerals, New York: Harcourt, Brace and World, Inc., 1943.

ACTIVITIES **Level:** I (K-2)

Concept: Career

Subconcept: People do many kinds of work.

B. O. The student will identify the different kinds of work people do in the home, school, and community.

Area	
S.S.	After viewing audio-visual material, participating in field trips, and talking with resource people, the students will present skits concerned with different kinds of work people do in the home, school, and community and play "Who Am I?"
S.S.	The student will make a chart listing the family members and telling the work they do in the home.
S.S. - L.A.	"Lids for Kids" project: Teacher arranges for a collection of hats or headgear representative of a number of workers. After receiving information about various jobs, each student will role play a particular job symbolized by one of the hats.
L.A.	The student will discuss simple interview techniques and prepare questions for interviewing a variety of community workers.
L.A.	The student will play "Twenty Questions" to guess the job of a worker in the home, school, and community.
L.A.	The student will construct four language arts trees (writing, reading, listening, speaking) and decorate the trees with names of workers in the home, school, and community who need to use these skills.
Math	Given a chart showing specific mathematical areas such as measurement, the use of money, the use of geometric shapes, etc., the student will (a) assemble pictures showing different kinds of work done by people in his immediate environment, (b) form subsets of workers as determined by the areas shown on the chart, and (c) map the subsets onto the chart.
Math	Given patterns of geometric shapes (circles, rectangles, triangles, squares) the student will (a) make models of workers using geometric shapes, (b) identify the models by the types of work done, and (c) make number stories about the workers.
Science	After going on a field trip through the community, the student will list those occupations that are associated with science.

Science	After discussing problems associated with insects, pests, and harmful microorganisms, the student will help in making an experience chart about those people associated with the prevention and control of specific diseases.
Science	The student will observe some type of household appliance and speculate as to the types of work done and the occupations of the people involved in the entire process that resulted in the appliance---from miners for the raw material to the different types of assembly people.
Music	After the student searches magazines for pictures showing the ways in which music is used at home, in school, and in the community, he will prepare a collage. He will make a tape recording to present to the class to explain his collage.
I.A.	Given the necessary tools, materials, and paints, the students will make cut outs of their favorite community workers. The students will use the cut outs to make jig saw puzzles depicting community workers.

Taken from:

Career Development K-12
Level I (K-2)
Anne Arundel County
Annapolis, Maryland
Pages 19-20

Questions and Facts	Concepts	Techniques	Resources
II. Why work? People work because: (1) they need money, (2) it gives them satisfaction, (3) it keeps them physically in tune, (4) it can provide status and prestige, (5) they need each other for survival reasons.	1) People get paid for doing a job. 2) Money buys many things: pay bills, buy foods, buy clothing, for enjoyment. 3) People can be proud of a job well done. 4) Work takes up time.	1) Utilize classroom helpers as paid workers (children paid in play money for jobs they do in and out of class) 2) Plan a trading day - child brings in toy or possession (with parental approval) to trade in class. (bringing out idea of barter before money was available.) 3) Praise honest effort---accentuate the positive. 4) Plan a classroom assembly line (children have individual tasks; for example, manufacture of paper chain---one student supplies paper, one student draws straight line, etc.	

Taken from:

Vocational Development in the Elementary School
Developed by The Mid-Hudson Career Development
and Information Center

"THE WORLD OF THE FARMER"

Resource Unit
for
Primary Levels

developed
by
Martha Simpson
Primary Teacher

Regional Career Education Development Project
1501 Frederica Street
Owensboro, Kentucky 42301

THE WORLD OF THE FARMER

Major Goal:

To acquaint the student with the world of the farmer.

Objectives

I. To acquaint the student with the world of the farmer through:

    A. actual contact with the farmer.

    B. actual contact with the farm and its related industries.

    C. simulation activities.

II. To develop skills in the language arts through:

    A. phonetic development.

    B. story telling and writing.

    C. listening.

    D. letter writing.

    E. interviewing.

    F. vocabulary development.

III. To make the subject enjoyable and informative for the student through:

    A. mathematics.

    B. music and art.

    C. games.

    D. reading.

    E. films and filmstrips.

Concept Development

I. There are many types of farmers.

II. The farmer must be knowledgable in many areas.

    A. He may use many different types of tools and machinery.

B. He may work with animals.

C. He may work with plants.

III. The climate and weather are major factors in determining the work of the farmer.

IV. The products of the farm are necessary for other industries.

A. Milk is the source of many foods.

B. Wheat is the basic ingredient of bread products.

C. The fruits and vegetables we eat are products of the farm.

D. Farm animals provide meat products.

LANGUAGE ARTS

Developing Phonetic Skills

Think of words starting like "farmer." Choose other appropriate words.

Think of words ending like "farmer." Select other appropriate words.

Think of words with the same vowel sound as "hay". Choose other appropriate words.

List words from the vocabulary list that have a silent final "e."

Search for words in the vocabulary list that contain blends.

Clap the syllables of farm related words.

Think of rhyming words for farm related words.

Using Library Books

Keep a collection of "farm" books on hand in the room.

Children can select books to read to the class or to a small group.

Students can go through library books to find things they want to see during a field trip.

Utilizing the Vocabulary List

Find little words in the words from the list.

Alphabetize a list of words.

Assign words for the children to recognize.

Learn to spell selected words.

Keep a large supply of alphabet macaroni on hand. Children can use this to spell out words.

Writing

Write stories about the farm.

Develop a picture dictionary for the classroom.

Write poetry and dramatize it.

Write a play and produce it.

Write letters of invitation to visitors welcoming them to the classroom.

Write thank-you notes to classroom visitors after their visit.

Write thank-you letters after a field trip is over.

Compile booklets of information about topics as they are explored.

Using Equipment

Let children practice interviewing each other and tape their efforts.

Use a tape recorder when interviewing guests.

Show a sound film without turning up the sound. Let the students observe the film to see what they can gather by sight and their own thinking. After the film is completed, have the class discuss the film to see what conclusions they can draw. After the discussion show the film with the sound turned on so the students can determine the correctness of their thinking.[1]

Use a tape recorder for students to imitate animal sounds.

Activities for the Teacher

Make up a story full of false facts about the farmer. Have the children listen for the errors.

Develop experience charts with the children.

Create phrase cards about farm related subjects.

Write a story in short phrases to improve reading speed.

Write a story with missing words and let the children supply them.

---

[1] Tiedt, p. 188.

VOCABULARY LIST

Add to the list as new vocabulary is encountered.

acre
animal
apple
bakery
barn
barnyard
beef
bread
brooder
calf
cat
chick
colt
combine
corn
cow
cultivate
dairy
dog
duck
duckling
egg
fair

farm
farmer
feed
fruit
garden
goat
goose
gosling
grain
harvest
hatchery
hay
hen
hoe
hog
horse
kid
kitten
lamb
livestock
mare
meat
milk

piglet
plant
plow
pork
poult
poultry
puppy
rain
rake
ranch
rooster
seed
silage
silo
sheep
soil
tractor
turkey
vegetable
weather
wheat
yard
orchard

MATHEMATICS

Sets

Collect pictures of farm products to be arranged in sets and subsets.

Problems

Allow the students to create their own farm related math problems.

Measurement

The students may draw clocks to represent the time of day that different farm chores are performed.

Discuss the importance of the calendar to the farmer.

Have the students measure the temperature and rainfall and keep a chart. Relate the results to the affect on the farmer.

Discuss the measurement of meat. Obtain scales and weigh various objects in pounds.

Discuss the sale of meat. After each child has weighed himself, let him pretend that he is "for sale" at a dollar a pound. Each child can compute his own "sale price."

Obtain milk cartons (gallon, $\frac{1}{2}$ gallon, quart, pint) to compare sizes.

After milking a cow, measure the amount obtained.

Display egg cartons and tell the children that the cartons will hold a "dozen" eggs. Let them count the compartments to discover the meaning of the word "dozen." After they have made their discovery, let them arrange other objects in piles of twelve to see how many dozens they have.

Discuss the concept of "a half" and let the students discover the meaning of a half dozen.

Walk the perimeter of an acre to let the students get "the feel" of its size.

SCIENCE AND SOCIAL STUDIES

Hatch an egg.

Make butter.

Put one pint of cream (whipping cream is best) into a quart jar. Screw the cap on securely. Shake the jar until the butter begins to form. Pour a small amount of very cold water into the jar after the butter begins to form. Drain off as much of the liquid as you can without losing the butter. Use a wooden paddle or a rubber spatula to gather the butter together and shape it into a lump, draining off the liquid as you can. Salt to taste.[1]

Plant a garden.

Check resource books for ideas.

Utilize parent assistance if the project is large.

Plant a window garden for a winter time activity.

Make bread.

Utilize parent assistance and supplies, if necessary.

Bake bread in the school cafeteria.

Have a "tasting" party.

Collect different types of food that come from a farm and let the children sample them. Try to include the unusual. Blindfold the children before they taste so that they might guess what they are eating.

Invite classroom guests to give demonstrations.

---

[1] Instructional Unit #2. Newport, Ky.: Newport Independent School District.

ART ACTIVITIES

Farm Murals

Stitch a mural on burlap with each child contributing time on various figures being developed. Use a combination of appliqued cloth cut in various shapes and stitching done with yarn, string, and other threads.[1] Glue could be substituted when working with very young children.

Slides, filmstrips, transparencies, or pictures can be projected onto kraft or wrapping paper to help pupils make large murals. Selected material is projected onto the desired surface and the outlines are traced. When the outline is completed, the scene can be colored with paints or crayons. Scenes of practically any size can be created using the projection technique.[2]

Mobiles

Make mobiles featuring farm animals, foods from the farm, and so on. Each student can use a combination of materials---figures cut from magazines and mounted on stiff paper, items drawn on stiff paper, small lightweight animals of papier-mache, and other decorative additions of colored paper, plastic, or metal.[3]

Puppets

Ideas for finger puppets are quickly and easily made by the primary students. Roll a paper into a cylinder shape which is large enough to contain the index finger (other fingers are used, too). The head for the finger puppet may be cut from a magazine or drawn by the student; it should be on stiff paper which will remain erect when attached to the cylinder. Add yarn hair, eyes, ears, hats, collars, as desired. Arms can also be attached to the cylinder.

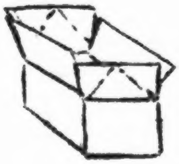
Hand puppets are equally successful and can be quickly made from cloth or paper. Cut two identical shapes from stiff paper, cotton cloth, or felt. The paper can be stapled together, but will not last as long as will the cloth which is sewn together. Eyes, hair, and simple clothing---scarves, aprons, belts, buttons---add to the fun.[4]

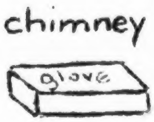
---

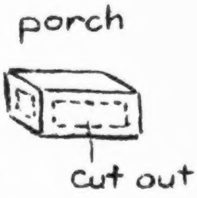
[1] Tiedt, p. 223.
[2] Calder, p. 67.
[3] Tiedt, pp. 204-205.
[4] Tiedt, p. 299.

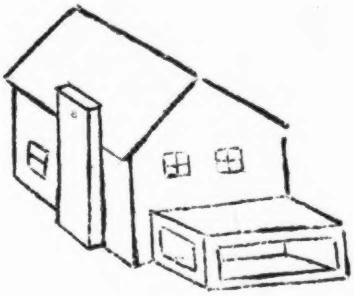
Constructing a Farm Scene[1]

Have your class build a farm display for exhibiting on a large table or counter. The farmhouse is made from cartons of several sizes. A glovebox chimney and shoe box porch, cut as shown, are added to the farmhouse, which is cut from a carton. Paint the house white; the porch and roof green; and the chimney red. Use tempera for adding the window and door detail. Trees cut from tagboard in varying shapes and colors may be used throughout the exhibit.

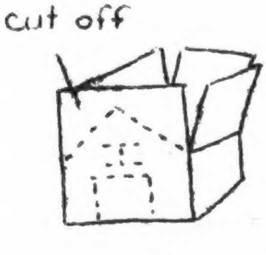


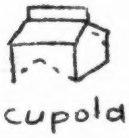


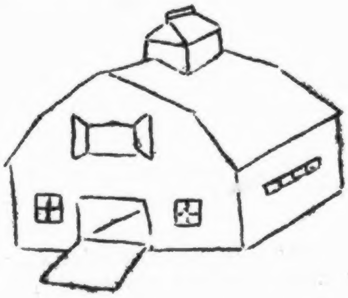




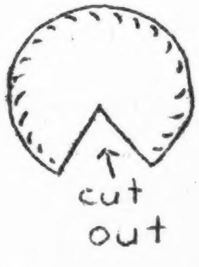
For the barn cut a carton as shown. Cut out the hay-loft door and entry. The top of a milk carton is cut off for the cupola. Place on barn roof. The barn is painted red with white trim.

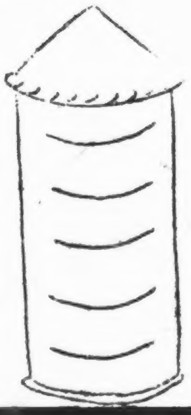






Brighten up your barn with a silver silo. Remove the label from a tall fruit-juice can. Add a roof made from an aluminum-foil pie tin. Cut out a pie piece section and staple together



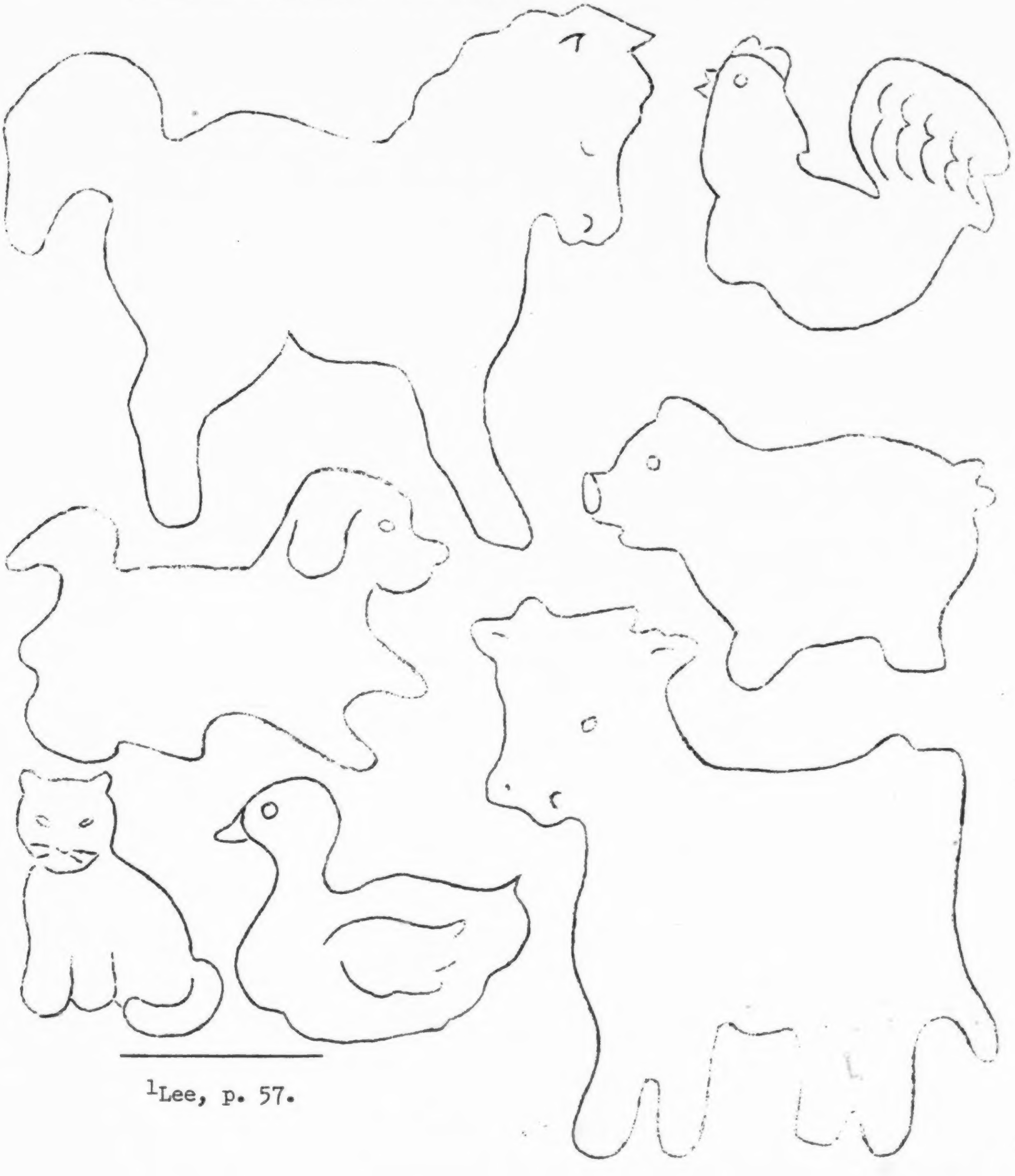


---

[1] Lee, p. 56.

Constructing a Farm Scene[1]

Have the children cut the animals from tagboard and trace around them on heavy construction paper. After the class has cut out the animals, the crayon details can be added. To make the animals stand - first, cut long strips of tagboard $\frac{1}{2}$ inch wide. Make the strip 6 inches long for the small animals and 8 inches long for the large animals. Second, paste the strip into a circle. Third, each animal is attached to the circle.



---

[1] Lee, p. 57.

MUSIC

Songs

"Old MacDonald"
"Six Little Ducks"
"Bingo"
"That's How We Live on the Farm"[1]
"Driving the Tractor"[2]
"The Farmer"[3]
"I Wish I Were a Farmer"[4]
"Living on a Farm"[5]

Songwriting

Encourage students to write words to familiar tunes.

Local Talent

Invite parents or local musicians into the class to teach a new song.

Musical Games

"The Farmer in the Dell"

Music Teacher

Make your music teacher aware of the unit being studied and ask her to teach appropriate songs.

---

[1] Carrier, Robert J. Grade Teacher. Sept., 1971. Pp. 90-91.
[2] Together We Sing.
[3] New Music Horizons.
[4] This is Music, Grade 1.
[5] This is Music, Grade 2.

GAMES

Simon Says

Adapt "Simon Says" to activities of the farm. For example, "Hoe your garden," or "Milk the cow."

Farmyard

This is a very noisy game for a group where there are 15 to 30 people. The teacher writes the names of different animals on slips of paper and gives one slip to each student. Depending on the number of participants, write the name of the same animal on from three to five slips. If there are fifteen participants, for example, it is a good idea to use the names of five animals---ducks, dog, cat, sheep, and pig. Write "duck" on three slips of paper, "dog" on three slips, and so on. When everyone has received his slip of paper and knows what animal he is, all the players are blindfolded. Then, at a signal, the players start imitating the animals on their slips in order to attract the others who have drawn the same animal. They try to find each other. When two dogs, for example, have found each other, they hold hands and hunt for the one or more players who are barking like dogs. The first group to get all its members together wins; but the game usually keeps on until all the animals have got together in their own group.[1]

Ducks Fly

The players stand in a line, with one chosen to be the leader standing in front of them. The leader starts off by saying, "Ducks fly," and flapping his arms like wings. All the others must immediately flap their arms, too. The leader continues by saying, "Cats meow," and meowing. All the others copy him. Next may come, "Horses trot," "Hens cluck," "Roosters crow," and "Cows moo." Each time everyone makes a sound or the appropriate motion. After a few animals have been named, the leader tries to trick the others. He makes a false statement such as, "Roosters cluck," or "Dogs moo," and starts to cluck or moo, as the case may be. If any player starts to cluck or moo after him, he is out of the game and leaves the line. The game can keep on until all the players are out.[2]

Making Words

Make as many words as possible from the word "farmer."

---

[1] Leeming, pp. 55-56.
[2] Leeming, pp. 46-47.

Hidden Words

A puzzle which encourages each student to find as many of the listed words as possible by moving one space at a time vertically, horizontally, or diagonally. A word may be started with any letter on the chart.

K	I	D	C	H	D	X
Y	I	T	A	O	G	P
N	C	T	G	R	W	U
O	H	P	T	S	N	P
P	I	G	L	E	T	P
G	C	Z	H	C	N	Y
L	K	F	L	A	C	I
~~B~~	~~A~~	~~B~~	~~Y~~	T	K	J

Animals and their Babies

baby (example)
cow
horse
pig
hen

goat
dog
cat
calf
pony

piglet
chick
kid
puppy
kitten

TYPES OF FARMS THAT MAY BE VISITED

Type	Name of contact	Address	Phone
Livestock			
Feed Grain			
Dairy			
Tobacco			
Fuiit Orchard			
Poultry			
Vegetable			
Ranch			
Cotton			
Other			

Suggested Activities During a Visit

1. Interview a farmer.
2. Ride a horse.
3. Ride a tractor.
4. Pet animals.
5. Feed animals.
6. Gather eggs.
7. Milk a cow.
8. Pick fruit.
9. Explore a garden.
10. Visit a barn.
11. Wade in a pond.
12. Have a picnic.
13. Go on a hayride.
14. See farm equipment in operation.

Farm Related Businesses

1. Bakery
2. Hatchery
3. Dairy
4. Flour mill
5. Stockyard
6. Tobacco warehouse
7. Vegetable market
8. Cotton mill

FIELD TRIP CHECK LIST[1]

☐ The purpose of the trip is clear to all.

☐ The time away from school is realistic for the age and maturity level of the students.

☐ Transportation has been carefully arranged.

☐ Permission has been secured from proper school administrators.

☐ Written permission has been secured from the parents.

☐ The field trip destination has been visited before the trip by the teacher, and arrangements have been made for guides or others who will contribute to the effectiveness of the learning experiences.

☐ All safety hazards have been checked.

☐ Parents or other adults to accompany the group have been invited and advised of their responsibilities. (One adult to every five children is a good ratio.)

☐ Name tags or other means of identification have been made.

☐ Planning with the children has taken place. They are aware of the expected behavior, purpose of the trip, names of adults and all pertinent information.

☐ Procedures for evaluation have been planned.

---

[1] Collier, p. 219.

EVALUATION

Pre-test

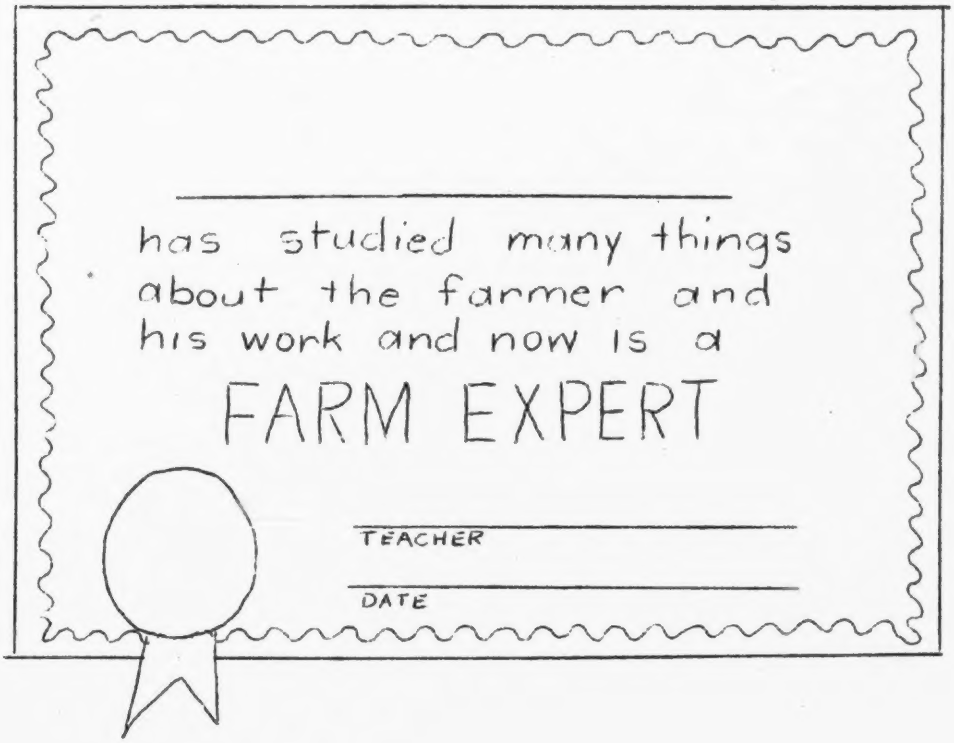
Before beginning the study of the farmer, construct a brief test consisting of true or false items. Use the results as a guide for presentation of information. Record the scores and keep the tests for future reference.

Post-test

After the study of the farmer has been completed give the students the same test again. Let them compare the answers they gave on the two tests. Where answers differ, ask them to give a reason for the change in answers.

Certificates

Prepare a certificate or award to present to each student at the completion of the study. A sample certificate is illustrated.



has studied many things about the farmer and his work and now is a

FARM EXPERT

TEACHER

DATE

Student Bibliography

Banks, Marjorie Ann. How Foods are Preserved. Chicago: Benefic Press, 1963.

Banks, Marjorie Ann. How We Get Our Dairy Foods. Chicago: Benefic Press, 1963.

Barr, Jene. Baker Bill. Chicago: Albert Whitman and Co., 1953.

Boreman, Jean. Bantie and Her Chicks. Chicago: Melmont Publishers, 1959.

Collier, Ethel. I Know a Farm. New York: William R. Scott, Inc., 1960.

Friskey, Margaret. Mystery of the Farmers Three Fives. Chicago: Children's Press.

Green, Mary Moore. About Apples From Orchard to Market. Chicago: Melmont Publishers, 1960.

Hayes, Will. Biggest Pig. Chicago: Melmont Publishers, 1958.

Hurd, Edith Thacher. Mr. Charlie's Farm. Philadelphia: Lippincott, 1960.

Ipcar, Dahlov. Brown Cow Farm. New York: Doubleday and Company.

Ipcar, Dahlov. Then Big Farms. New York: Alfred A. Knopf.

Lewellen, John Bryan. Tommy Learns to Drive a Tractor. New York: Crowell, 1958.

Liffring, Joan. Dee and Curtis on a Dairy Farm. Chicago: Follett, 1957.

Lindman, Mai. Snipp, Snapp, Snurr and the Big Farm. Chicago: Albert Whitman and Co., 1946.

McCall, Edith S. The Buttons at the Farm. Chicago: Benefic Press, 1961.

Meuer, William. How Farms Help Us. Chicago; Benefic Press, 1970.

Payton, Evelyn. About Farm Helpers. Chicago: Melmont Publishers, 1967.

Pfloog, Jan. The Farm Book. New York: Golden Press, 1964.

Schloat, G. Warren, Jr. The Wonderful Egg. New York: Charles Scribner's Sons, 1952.

Scott, William R. The Apple That Jack Ate. New York: William R. Scott, Inc., 1956.

Directory of Publishers for Student Bibliography

Benefic Press
10300 W. Roosevelt Road
Westchester, Illinois 60153

Children's Press, Incorporated
1224 West Van Buren Street
Chicago, Illinois 60607

Thomas Y. Crowell Company
211 Park Avenue, South
New York, New York

Doubleday & Company, Incorporated
Garden City
New York, New York 11530

Follett Publishing Company
1010 W. Washington Blvd.
Chicago, Illinois 60607

Golden Press, Incorporated
850 Third Avenue
New York, New York 10022

Alfred A. Knopf, Incorporated
501 Madison Avenue
New York, New York 10022

J. B. Lippincott Company
E. Washington Square
Philadelphia, Pennsylvania

Melmont Publishers, Incorporated
1224 West Van Buren Street
Chicago, Illinois 60607

William R. Scott, Incorporated
333 Avenue of the Americas
New York, New York 10014

Charles Scribner's Sons
597 Fifth Avenue
New York, New York 10017

Albert Whitman & Company
560 West Lake Street
Chicago, Illinois 60606

Films[1]

"Adventures in Dairyland" 28 min. color (Am. Dairy Assn.)
Operation of a dairy farm is presented from a teenage viewpoint.

"Apples (From Seedling to Market)" 10 min. color (EBF)
Shows growing of delicious apples from planting to packaged fruit.

"Cattle Drive (A Day on a Western Range)" 11 min. color (EBF)
Portrays movements of cattle from range to shipping point, and the many duties of a cowboy during the drive.

"Cotton Farm" (1957) 15 min. (Net)
Story of planting, harvesting, and packing cotton.

"Dairy Farm" 15 min. (Cor.)
Pictures life on a dairy farm. Shows pasture scenes, interior of a dairy, milking cows, cooling milk, haying, and silo filling.

"Farmer" 15 min. color (EBF)
Story of modern farm life shows exciting day at harvest time when boy helps father harvest oats before a storm strikes. Also shows other chores being done and mother and sister at work in the home.

"Farmer Don and the City" (1959) 11 min. color (FAC)
Uses the experiences of a carrot farmer to illustrate that though he grows the food people need, he, in turn, depends on people in the city.

"Judy Learns About Milk" 10 min. (YAF)
Judy visits her uncle's farm and sees how the cows are fed, cared for, and milked. Also shown are the silo, the hayfield, the barn. Tells how the milk is cared for, taken to the dairy, and delivered by the milkman.

"Let's Visit a Poultry Farm" 10 min. (Cor.)
Girl visits a poultry farm and sees chickens feeding. She also sees the gathering and packaging of eggs.

"Machines that Help the Farmer" 11 min. color (FA)
In caring for their backyard garden, two children use a spade to prepare a seed bed, a rake to level the ground, and a hoe to cultivate. Shows how the farmer does the same jobs with a tractor and attached tools.

---

[1] Norris, pp. 203-204.

Filmstrips

The Foods We Eat
Sound Filmstrips P/I SVE
211-1 "How We Get Bread"
211-2 "How We Get Milk"
211-3 "How We Get Meat"
211-4 "How We Get Poultry and Eggs"
211-5 "How We Get Fruits"
211-6 "How We Get Vegetables
J211-SAR Set: 6 F/S, 3 records.....$49.50
J211-SATC Set: 6 F/S, 3 cassettes.....$55.50

How We Get Our Foods captioned filmstrips P SVE
203-1 "The Story of Milk"
203-2 "The Story of Bread"
203-3 "The Story of Fruits and Vegetables"
203-4 "The Story of Meat"
J203-S Set: 4 captioned filmstrips.....$21.60

The Story of Milk
8mm film loops P/I captioned with records SVE
SU-5 "The Dairy Cow"
SU-6 "How a Cow is Milked"
SU-7 "How Milk is Processed"
SU-8 "How Milk Comes to Us"
JSU-102SR Set of 4 super 8mm loops with 4 dual level 7" records.....$74.50

89: Animals on the Farm
Combination of charts and filmstrips K/P Eye Gate
89A "Dinky, the Calf"
89B "Fluffy, the Chick"
89C "Frisky, the Colt"
89D "Billy, the Goat"
89E "Tiny, the Kitten"
89F "Fleecy, the Lamb"
89G "Porky, the Pig"
89H "Pat, the Puppy"
89I "Our Poultry Farm (Ducks, Geese, Turkeys)
TF89 Complete set of 9 captioned color filmstrips with 5 cassette Teach-A-Tapes, 10 Teach-A-Charts and teacher's manual......$81.50
F89 9 captioned color filmstrips, 10 Teach-A-Charts and teacher's manual.....$56.50
Individual filmstrip.....$6.00
Individual cassette.....$5.50

Individual Filmstrips:	captioned	color	Eye Gate
105A "Spring and Summer"	K/P		$6.00
105B "Autumn and Winter"	K/P		$6.00
111D "Plants"	P		$6.00
111E "Plants and Seeds"	P		$6.00

Directory of Film and Filmstrip Distributors

(Am. Dairy Assn.)
American Dairy Association
20 N. Wacker Drive
Chicago, Illinois

(Cor.)
Coronet Instructional Films
Coronet Building
Chicago, Illinois

(EBF)
Encyclopedia Britannica Films, Inc.
1150 Wilmette Avenue
Wilmette, Illinois

(FA)
Film Associates
11014 Santa Monica Blvd.
Los Angeles, California

(FAC)
Film Association of California
10521 Santa Monica Blvd.
Los Angeles, California

(Net)
Net Film Service
Indiana University
Bloomington, Indiana

(YAF)
Young America Films, Inc.
McGraw-Hill Book Company
Text-Film Dept.
320 W. 42nd Street
New York, New York

SVE
Society for Visual Education, Inc.
1345 Diversy Parkway
Chicago, Illinois 60614

James W. Hicks
District Manager
Route 1, Holt Road
Paducah, Ky. 42001
(502) 554-2570

Eye Gate House
146-01 Archer Avenue
Jamaica, N. Y. 11435

William P. Jones
Representative
3816 Riverside Drive
Owensboro, Ky. 42301
(502) 683-6619

Miscellaneous Materials

Title	Price	Source
"The Farm" Flannel board kit #87	$2.95	Instructo
"Milk - Farm to Table" 6 posters*	.75¢	National Dairy C.
"Food Models" Full-color cardboard models*	N/A	National Dairy C.
"Let's Make Butter" An activity folder for the child*	N/A	National Dairy C.
"Our Food...Where It Comes From" Colorful booklet and simple text tell of dairy foods, meat and eggs, vegetables and fruits, grains and cereals, and their sources. Grades 1 and 2.*	N/A	National Dairy C.
"Milk for You and Me" "Ice Cream for You and Me" Primer type booklets about these foods and how we get them.*	N/A	National Dairy C.
"What Will I Be From A to Z?" Booklet in verse with gay art, about vocations and health habits. Grades 2 and 3.*	N/A	National Dairy C.

*Guide for the teacher available

National Dairy Council
111 N. Canal Street
Chicago, Illinois 60606

Instructo Products Co.
Philadelphia, Pennsylvania

References

Calder, Clarence R., Jr. and Eleanor M. Antan. Techniques and Activities to Stimulate Verbal Learning. New York: The MacMillan Company, 1970.

Collier, Mary Jo, Imogene Forte, and Joy MacKenzie. Kids' Stuff. Nashville, Tennessee: Incentive Publications, Inc., 1969.

Lee, Carvel. Kindergarten - Primary Art Activities. New York: F. A. Owen Publishing Co., 1956.

Leeming, Joseph. The Real Book of Games. New York: Garden City Books, 1953.

Leeper, Sarah Hammond, Ruth J. Dales, Dora Sikes Skipper, and Ralph L. Witherspoon. Good Schools for Young Children. New York: The Macmillan Co., 1968.

New Music Horizons, Grade 2. Chicago: Silver Burdette Company.

Norris, Willa. Occupational Information in the Elementary School. Chicago: Science Research Associates, Inc., 1963.

This is Music. Grade 1. Boston; Allyn and Bacon.

This is Music, Grade 2. Boston: Allyn and Bacon.

Tiedt, Sidney W. and Iris M. Tiedt. Elementary Teacher's Complete Handbook. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1965.

Together We Sing, Grade 2. Chicago: Follett Publishing Company.

"IS THIS A HANDS ON ACTIVITY?"

SUGGESTED ACTIVITIES

for

Relating Career Information to Language Arts

Stress the importance of forming good listening habits, not only for knowing what to do now, but for success in future careers.

Learn to listen, identify, and in some instances, reproduce sounds heard on different jobs by listening at school, at home, and wherever they go.

Allow students to make sounds various workers might make or hear on the job, while the rest of the class attempts to identify these sounds.

Children can ask their parents what they do at work and report to the class by acting out what the jobs are.

The teacher may ask children to discuss the occupations suggested by their surnames. Names such as Smith, Taylor, Baker, and Tanner suggest occupations which may be discussed by the class.

Ask children to notice various types of businesses on their way to school, and tell about this to the rest of the class.

Ask the children to give directions from school to their house and from their house to a business in town.

Divide the class into committees and report to the others on how one important factor (price of land, customs, resources, etc.) affects the life of their neighborhood, country, state, etc.

Take a walking trip from school. Relate this to the careers of people required to do a good bit of walking, such as the postman.

Primary children may list as many careers as they can think of, in order of preference.

List occupations on the board and ask children to place them in alphabetical order.

Primary children can keep word books of new words related to community helpers.

Intermediate students may read at least one book pertaining to the career of their choice and compile their own personal list of spelling words from this book.

Discuss the behavior and character of working people in stories read.

After reading part of a story about a worker or work situation, children can predict what is going to happen next.

Ask children to describe in writing what they like about their favorite careers.

Some children enjoy pretending that they are pilots of riverboats on the Mississippi or a cross-country bus driver. Have them to write a diary about their imaginary experiences.

Research careers related to moon explorations and compile a booklet of news pictures and stories and make a list of careers related to space science.

Various duties performed by students in the classroom may be related to occupations. For instance, a child may be a class librarian and discuss the role of librarians in schools and public libraries.

Write industries for samples of their products and make a display of these.

Write letters to the U.S. space centers at Houston, Texas, Huntsville, Alabama, and Cape Kennedy, Florida.

Plan a debate on some aspect of the pollution problem.

Group like words together, such as "farmer" words, "garbageman" words, etc.

Make riddles about occupations.

Make an alphabet story for a unit. Begin with A and try to use every letter of the alphabet in an important statement. Example: A is for Akron, where tires are made.

Ask students to place periods where needed on ditto sheets describing careers.

Ask students to write questions they would like to have answered about a career they like. Stress correct punctuation.

Give a research assignment on a person in a particular field and ask the students to include some direct quotes in their written reports.

Ask children to correctly write and punctuate conversation pertaining to a specific career. Example: What a doctor and his patient might have to say to one another.

Intermediate children can arrange five career oriented sentences into paragraph form.

Use several references as sources of information on careers of their choice and have the students organize their notes into outline form.

Bring pictures from newspapers and magazines about women and men at work. Allow the children to tell what they know about the jobs shown.

Search the newspaper for unusual occupations.

Look for careers represented in the comic strips.

List careers related to the newspaper.

Study the classified ads and listed jobs available to people with high school training or less. Name the salary, if given. A prize may be given for the longest list. Another list may be made for jobs available to people with college training or more and another for people with special training.

Purchase newsprint from the local newspaper office and set up a class newspaper.

Decide upon a product or service you would like to advertise and make a poster to be displayed in the classroom. Be creative.

Choose a product and prepare a one-minute commercial about it. Give the commercial in front of the class and then ask for their constructive criticism.

Select a product such as a household appliance, cooking utensil, or an automobile. Make imaginary modifications of certain features of the product that would make it more useful.

Some children may wish to pretend that they are artists and are visiting a national park to paint pictures of it. Arrange for an exhibit of those pictures.

Make a "movie" of a local industry (pictues on roll of paper) demonstrating what is done there.

Construct a mural to show how small business depends on industry and how small business depends on individuals who work in industry.

Make a downtown window display of "do's" and "don'ts" of behavior and manners on streets.

Construct a model of a factory with a flow chart showing the process of producing the product.

Construct a salt and flour or clay relief map showing the community with legend pointing out new roads, new schools and other community changes that are associated with the industrial growth of the community.

Make miniature floats for various states depicting some industry or other important thing for which that state is prominent. Children may arrange programs centering around thise floats.

Teachers may relate various hobbies to the world of work. For instance, the aviation industry may be studied while students bring model airplanes from home or construct model airplanes at school.

The students in the class may want to write, design, and produce a one-act play involving occupations.

Students can conduct a mock trial complete with jury, witnesses, defense and prosecuting attorneys. Some students can act as reporters and write news stories on the trial.

Collect pictures of simple machines and discuss how each one saves time.

During a study of simple machines, a class may visit a vocational school to observe machinery in use.

Mock or real interviews which relate to various occupations may be conducted and possibly taped. Students may conduct a skit on the right and wrong things to do during an employment interview.

Elementary school pupils may interview junior high students and junior high students may interview high school students to determine what the students liked and disliked about school. Their responses may be tallied and may indicate that different people have different needs and find different activities rewarding.

Have the children to draw pictures of career people and label them with correctly spelled titles.

Students may come to school dressed as various types of workers. A prize might be given to the student with the most original costume.

Various types of manipulative tasks may be performed in the classroom in order to help the student determine whether he is suited for or would like a particular type of job. For instance, students may want to get the feel of assembly line work. They may first be arranged in a circle and each student given a handful of nuts and bolts. Each student should place the nuts on the bolts and place them so that the students next to him can take the nuts off the bolts. This procedure can be completed several times thus giving students the feel of production line work.

Play listening games which require listening to definite directions such as: Go to the door. Put the book on the desk. Walk six steps to the north.

Play a game to see how many occupations they can name in alphabetical order. The first child on each team names an occupation beginning with A, the second names one beginning with B, the third with C, and so on. When a child misses, he takes his seat. The team with the most players left after going through the alphabet wins.

Students may engage in various types of quiz games relating the games to occupations. For instance, students my play "Twenty Questions" or "What's My Line?" by giving the class clues about an occupation and trying to guess the occupation in twenty questions or less.

Students may play a game in which teams of students name job areas involved in handling a particular emergency. For instance, a three-year-old boy has swallowed some lye. The telephone operator, doctor, nurse, etc. would be some of the people involved in handling the emergency. The team which names the most jobs is the winner.

Crossword puzzles where questions are asked concerning various occupations may be used by the teacher.

A maximum of approximately 100 questions concerning occupations may be placed on a spinner board. An arrow attached to the board may be spun by students. Students must answer the question indicated by the stopping of the arrow.

SUGGESTED ACTIVITIES

for

Relating Career Information to Mathematics

In a primary class discuss the need for different community workers knowing cardinal numbers.

Name workers who use ordinal numbers---teachers, homemakers, ministers, etc. Role play these workers.

List careers in which Roman Numerals are used. Examples: clockmakers, writers, teachers, stoneworkers, etc.

Farm animals may be used to show joint and dis-joint sets.

Ask the children to divide a set of farm animals into subsets of cows, pigs, chickens, etc.

Draw clocks to illustrate answers to the following questions:
1. What time does your father go to work?
2. What time does your mother go to work?
3. What time do you go to school?
4. What time do you go home?
5. What time do you eat lunch?

Use a clock in the classroom to measure the times needed for baking, freezing food, drying paint, etc.

Have students construct a model of a time clock similar to that used in a business or industry. Discuss why time clocks are used.

Investigate time zone and time changes and relate the findings to the effect on the radio and television industry.

To point out the need for standard units of measure in occupations, have the students use non-standard units of measure to measure the same item.

Use a ruler to measure strips of wood into different lengths and cut with a saw.

Measure objects in inches, feet, and yards and have the class determine the easiest unit of measure for the object at hand.

Students can ask their parents to help them list various ways linear measurement is used at home and in their occupations during a days work. Compile and discuss a classroom list.

Discuss the different size cartons of milk and cream the milkman delivers. Use empty cartons as visual aids.

Have groups play "doctor" and "nurse" and have temperature taken.

Set up a play store using empty boxes, cartons, etc. Give each child an opportunity to make change and to play the role of both the merchant and the consumer. Discuss the ways the grocer makes profit and the consumer saves money to buy goods from other merchants; how advertising helps or hurts business; and how advertising helps the consumer.

While playing store, use money to show how numbers can be renamed.

Ask the children to write story problems having to do with work situations.

Discuss the reasons for using multiplication instead of simple addition in business---to speed up service and record keeping.

List the different occupations mentioned in a series of math problems.

Become familiar with the operation of a calculating machine and an electronic calculator. Perform these manipulations: adding, subtracting, multiplying, dividing, accumulating, etc.

Allot a student an imaginary sum of money. Allow him to select three items from a variety of catalogs to be purchased with his "money." Let him explain why he chose as he did.

To help children learn to spend money wisely, make budgets for two families of the same size, from two different income brackets. Attempt to meet the needs of both families.

Teachers may use a grading system by which each student keeps a checking account and writes checks corresponding to the monetary value placed on his work by the teacher. Specific dollar amounts correspond to letter grades. For instance, a student may have to earn $900 for an A, $800 for a B, $700 for a C, and $600 for a D. The student thus knows exactly the dollar amount he has earned and the number of additional dollars he must earn to receive the grade which he desires. Some teachers allow students to receive a loan at the end of a grading period, which must be repaid. Besides knowing his grade at all times, the student learns how to keep a check book.

Make comparisons between wages and salaries paid in various kinds of work.

Make a booklet of favorite recipes. Each child can copy one recipe. The importance of writing down the exact measurement for each ingredient should be stressed.

Use scales and liquid containers to practice measuring as a housewife, grocer, doctor, etc. would.

Allow children to measure the ingredients for and stir up a simple loaf cake. Discuss the process, the relation of what they are doing to the measuring required of mothers, fathers, bakers, candy shop owners, and professional cooks.

Dramatize a restaurant situation in which a waitress cuts a pie into fourths, sixths, and eighths.

Discuss careers in which a knowledge of fractions is required.

Have students measure temperature and rainfall and keep a chart. Relate the results to the effect on various occupations.

SUGGESTED ACTIVITIES

for

Utilizing Community Resources

Service clubs and professional organizations such as American Legion, Lion's, Civitan, Optimist, Veterans of Foreign Wars, Rotary, Kiwanis, Masons, League of Women Voters, Junior Chamber of Commerce, and parent-teacher organizations are often willing to sponsor activities relating to occupations. Service clubs may sponsor career days, provide speakers for classes, set up field trips, arrange interviews, and provide many other services.

Career exhibits for which local industry, professional, and labor groups produce materials may be arranged in the school. Some schools use the gymnasium for housing the exhibits. Students may be allowed to visit the exhibit during free periods and lunch time. Teachers may want to bring their entire class during regularly scheduled classes. Arrangements may be made for parents and other visitors to view the exhibit in the evening hours.

Career days are fairly common in schools. Guests from a variety of occupations are invited to make speeches and answer questions about their occupations. Special career days for specific groups of businesses, organizations or industries may also be arranged. Some schools have arranged for Armed Forces Days where representatives from all branches of the service visit the school. A special career day, for instance, could be arranged for only retail merchants.

Career clubs have been formed in schools where students may have regular meetings and investigate various occupations.

The school might sponsor an essay contest on "What My Career Will Mean to Me." A prize of about $5.00 or a donation solicited from local merchants could be offered for the best essay.

It is often difficult to provide work experiences for students within the classroom setting. Some teachers have encouraged their students to engage in activities outside of the classroom which will enable them to determine which types of work experiences they find most satisfying. Students may mow lawns, repair furniture, paint or wallpaper their rooms, wash dishes, sweep floors, prepare meals, sew clothes, and perform many other activities around the house. An activity card listing the various work experiences of individual students may be prepared. Students may be given extra credit on their grades for performing outside work experiences and reporting to the class.

"YOU MEAN I CAN REALLY GET UP?"

EXAMPLES OF CAREER ORIENTED BEHAVIORAL OBJECTIVES

GRADES 1 - 6

Shown pictures of 10 family jobs, the learner must be able to recall and match the name of the performer with at least 90% accuracy.

Every child will be able to identify his parent's occupation.

Shown a list of workers, each pupil will accurately name the service performed for his family by the different workers who come to his home.

Given a list of ten school tasks, the pupil will be able (with at least 90% accuracy) to identify the person performing the service.

Shown the pictures of four workers who help us stay healthy, the learner will be able to identify each of them, and at least one service of each.

Without the aid of a reference, the student will be ale to recall two duties of the policeman and the fireman.

Given a descriptive definition of other workers that help us, the learner will be able to identify the employment of 80% of them.

The pupil should be able to do the following:

1. Name 3 workers in each of the areas studied.
2. Describe each worker's job and explain its importance to the related field.

The learner shall be able to list the major occupational gro ups in the Pacific Northwest with 60% accuracy. He should be able to name two jobs found in each.

Given a major occupational group, the student is to demonstrate his ability to interpret its employment possibilities.

The pupil will be able to state one way in which at least two industries in different regions are dependent on each other.

Each child will be able to identify the principal industries and services in each of the regions of the United States with 80% accuracy.

The learner will be able to identify from the study the industries and services in the Western Hemisphere, the occupational differences and similarities among its people.

The pupil will be able to identify one way in which two industries in the United States and other countries in the Western Hemisphere are inter-dependent.

Eighty percent of the students will list three titles of occupationally oriented books they have read this year.

Eighty percent of the students will locate five references to occupational information.

Eighty percent of the students will find information concerning salary, training, required aptitudes, job characteristics and advancement opportunities for three occupations using the occupational reference books.

Ninety-five percent of the students will go on three occupational exploratory field trips.

All students will state the occupation of their parents.

All students will state where their parents work.

All students will state the activities performed within their parents' occupations.

All students will state education and/or the training requirements of their parents' occupations.

All students will state the advancement opportunities in their parents' occupations.

Ninety percent of the students will list five ways their school and personal records could affect future occupation and employment.

Eighty percent of the students will list the clusters offered at the high school.

Eight percent of the students will name five occupations found in each cluster offered at the high school.

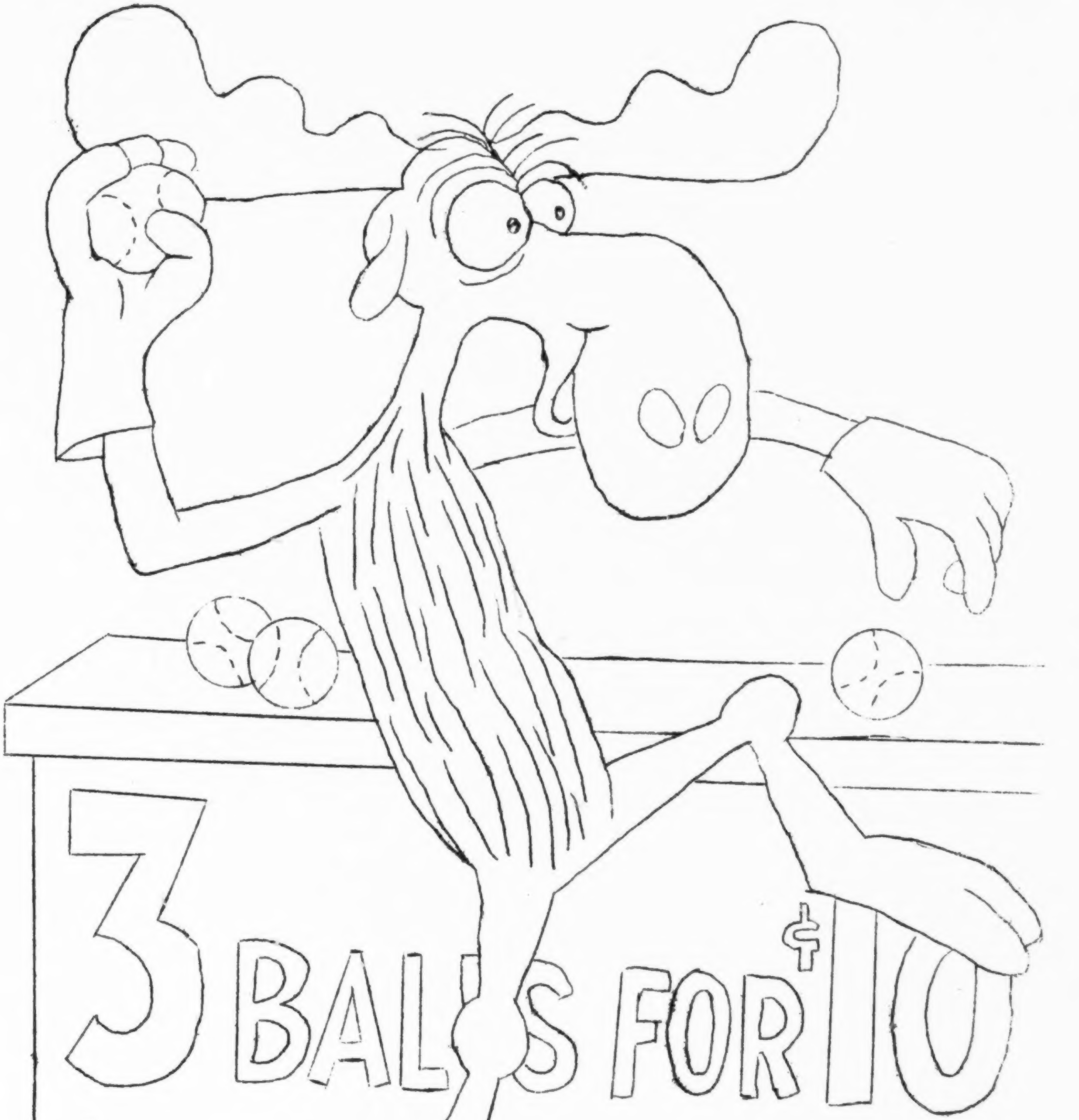
Ninety-five percent of the students will define the cluster concept.

Ninety percent of the students will correctly identify nine of the following:

A. Occupational skills
B. Requirement
C. Personality trait
D. Salary
E. Aptitude
F. Occupation
G. Vocation
H. Employer
I. Employee
J. Fringe benefit
K. Trade union
L. Apprenticeship
M. Career

Eighty percent of the students will list the steps in a decision making model.

Ninety percent of the students will participate in a decision making simulation.


3 BALLS FOR 10¢

AM I AIMING TOWARD THE RIGHT TARGET?

CONCEPTS TO TEACH

A career plan is not a once-and-for all decision. Theories of vocational decision emphasize that career choice is a process, not a single decision, and it begins early in life.

Among the most important principles to consider in career education for elementary students are the following:

1. Career choice is a developmental process rather than a singular intellectual choice made one day in secondary school or at a certain chronological age. It connot be left up to a haphazard mention of careers by a few knowledgeable teachers and then climaxed with a career day during the senior year of high school.

2. With the growing complexities of scientific and technological advancement, teachers must keep their knowledge consistently available to students.

3. Career information must be accurate, free of bias, current, and relevant to the developmental needs of students.

4. Career education needs to begin in elementary school, not to push children into making a vocational choice, but to present information to broaden the base of their understanding of the world of work as a background for later decisions.

5. Career education concepts should be integrated into the regular curriculum of the school. Thus, the student will be able to learn about and explore the relationship between education and the world of work.

The following list of concepts to teach suggested by grade levels are included in the book: *World of Work: A Handbook for Elementary School Teachers and Counselors* by Charleta J. Dunn, Ed. D and Bill F. Payne, Ed. D (Dallas: The Leslie Press Corp., 111 Leslie Street, Dallas, Texas 7[illegible]207, 1971).

CAREER GUIDANCE CONCEPTS

Kindergarten

1. Work satisfies many needs.
2. Work is expected of everyone.
3. Work is admired by society.

Grade 1

1. Work satisfies many needs.
2. Work is expected and admired by society.
3. An individual's major activity is his occupation.
4. People earn livings in many different ways.
5. School develops behaviors and skills needed for the world of work.

Grade 2

1. The major focus of a person's activities is his occupation.
2. Individuals work for different reasons.
3. Cooperative activity meets individual needs.
4. The ability to live and work independently is essential.
5. Some jobs require specific abilities and skills.
6. Workers produce goods and services.
7. Many workers' activities are related.
8. The division of labor makes man interdependent.

Grade 3

1. People earn livings in many different ways.
2. Individuals work for different reasons.
3. Cooperative activity meets individual needs.
4. The ability to live and work independently is essential.
5. Some jobs require specific abilities and skills.
6. School develops behaviors and skills needed for life and work.
7. People need producers of services and producers of goods.
8. Occupations are classified by main activity (job families).
9. Duties within job families are related.
10. The division of labor makes man interdependent.
11. Everyone has the potential for success.
12. Individuals differ in their skills, aptitudes, and interests.

Grade 4

1. Geographical location affects career opportunities.
2. Natural resources influence the world of work.
3. Supply and demand affect vocational opportunities.
4. Specialization exists in complex societies.
5. Evolving technology alters life and the world of work.
6. Facts about careers come from many sources and experiences.
7. Attitudes, values, interests and activities affect vocational choice.
8. Biological and familial factors affect career choice.
9. We learn about self from family, peers, and others.

Grade 5

1. Geographical location influences vocational opportunities.
2. Specialization exists in complex societies.
3. Advances in sciences and technology change work.

4. The selected occupation affects the life pattern.
5. Jobs and skills can be related to different school subjects.
6. Education and training can modify occupational choice.
7. Self-knowledge--attitudes, values, interests, and activities as well as liabilities--is important to decision-making processes.
8. Every individual must make choices and solve problems.
9. Special abilities may qualify an individual for an unusual job.

Grade 6

1. Supply and demand affect occupational opportunities.
2. A country's economy, location, government, and laws affect career opportunities.
3. Different jobs will exist in the future.
4. Training requirements for skilled jobs have increased.
5. Increased job opportunities exist for females, the physically handicapped, and minority groups.
6. Information and exploration of jobs are essential to wise career decisions.
7. Occupational education and training is an on-going process.
8. Career choice is not final, it can alter in several ways.
9. Wise job choice is important to personal satisfaction.
10. Individuals are similar and, yet, dissimilar.
11. Some people are genuinely more suited to some kinds of jobs than to others.
12. Jobs are classified by responsibilities required.

"WHAT CAN I BUY?"

CAREER RELATED MATERIALS

available from

SCIENCE RESEARCH ASSOCIATES, INC.
1972 Catalog

Name of Filmstrip	Grade Level	Page
Stage One:"Awarehess"	K-2	178
Stage Two: "Responding"	2-4	179
Stage Three: (To be published in fall 1972)	4-6	
"Here I Am"	K-2	180
"The Me I Know"	2-4	180
"What I Like To Do"	4-7	180
Widening Occupational Roles Kit (WORK)	6-9	181

CAREER RELATED MATERIALS

available from

SINGER / SVE World of Work Catalog

Name of Filmstrip	Grade Level	Page
"The Adventures of the Lollipop Dragon"	Primary	2
"Getting to Know Me"	Primary	2
"Robert and His Family"	Primary	3
"The Little Engine that Could"	Primary	3
"Family Members Work"	Primary	3
"How We Get Our Food"	Primary	4
"How We Get Our Clothing"	Primary	4
"How We Get Our Homes"	Primary	4
"Community Workers and Helpers"	Primary	5
"Developing Basic Values"	1-6	2
"Learning to Live with Others"	1-6	3
"Learning About Manners"	1-6	3
"Children of the Inner City"	1-6	3
"The Foods We Eat"	1-6	4
"The Homes We Live In"	1-6	4
"The Story of Milk"	1-6	5
"Working in U.S. Communities"	1-6	5

Name of Record		
"Helping is a Good Thing"	K-3	3
"Knowing Our Community"	1-3	5

Picture-Story Study Prints		
"Community Helpers"	1-6	6
"Urban Life"	1-6	6

CAREER RELATED MATERIALS

available from

EYE GATE - 1972 Catalog

Name of Filmstrip	Grade Level	Page
"Think, Listen and Say"	1-3	17
"Friendship Fables"	1-3	18
"Understanding the City"	1-3	32
"Understanding the Community"	1-3	33
"Where Does It Come From?"	1-3	33
"Discovering the Inner City"	1-3	33
"Where Our Daddies Work"	1-3	35
"What's Around Us?"	1-3	62
"Life Begins"	1-3	74
"Good Health and You"	1-3	74
"Values"	1-3	78
"We're Growing Up"	1-3	79
"Let's Make a Picture"	1-3	88
"Thinking Clearly"	1-6	14
"My Mother Has a Job"	1-6	33
"The Story of Transportation"	1-6	36
"The Story of Communication"	1-6	36
"The Wonderful World of Science"	1-6	64
"Some Neighborhood Workers"	1-6	75
"Some Neighborhood Helpers"	1-6	75
"Workers for the Public Welfare"	1-6	75
"The Fundamentals of Thinking"	4-6	16
"Artists of Many Lands and Times"	4-6	23
"Authors of Many Lands and Times"	4-6	23
"Men of Music"	4-6	23
"Composers of Many Lands and Times"	4-6	23
"Men Who Helped Us Find Out"	4-6	25
"Leaders of America"	4-6	25
"Man Learns to Govern Himself"	4-6	26
"The American Farmer and Our Food Supply"	4-6	32
"America at Work"	4-6	32
"The Conservation of Our Resources"	4-6	34
"An Introducation to Ecology"	4-6	34
"Cities of our Country"	4-6	38
"Working with Maps"	4-6	55
"Maps and how to Use Them"	4-6	55
"The Space Age"	4-6	63
"Fundamentals of Economics"	4-6	72
"Living with Computers"	4-6	77
"Manners Make a Difference"	4-6	78
"Me, Myself, and I"	4-6	78
"How a Picture is Made"	4-6	88
"Exploring Paper"	4-6	93
"Ancient Crafts - Modern Times"	4-6	88
"Democracy in Action"	4-6	30
"Fundamental Elements of Weather"	4-6	63
"Science in Everyday Life"	4-6	64

DIRECTORY OF PUBLISHERS

listed in

Student Bibliography and Staff Resources

Addison-Wesley Publishing Co.
Incorporated
Reading, Massachusetts 01867

Benefic Press
10300 W. Roosevelt Road
Westchester, Illinois 60153

Bowmar
622 Rodier Drive
Clendale, California 91201

Children's Press, Inc.
1224 West Van Buren Street
Chicago, Illinois 60607

Coward-McCann, Inc.
200 Madison Avenue
New York, New York 10016

Criterion Books, Inc.
6 West 57th Street
New York, New York 10019

Thomas Y. Crowell Co.
201 Park Avenue South
New York, New York 10003

The John Day Company
62 West 45th Street
New York, New York 10036

Dodd, Mead and Company
79 Madison Avenue
New York, New York 11530

Doubleday and Company, Inc.
Garden City
New York, New York 60607

Fearon Publishers, Inc.
Lear Siegler, Inc.
Education Division
6 Davis Street
Belmont, California 94002

Follet Publishing Co.
1010 West Washington Boulevard
Chicago, Illinois 60607

Golden Press, Inc.
850 Third Avenue
New York, New York 10022

Grosset and Dunlap, Inc.
51 Madison Avenue
New York, New York 10016

E. M. Hale and Company
1201 South Hasting Way
Eau Claire, Wisconsin 54701

Harper and Row, Publishers
49 East 33rd Street
New York, New York 10016

Holt, Rinehart & Winston, Inc.
383 Madison Avenue
New York, New York 10017

Lerner Publications Co.
133 1st Avenue, N.
Minneapolis, Minnesota 55401

Little, Brown and Company
34 Beacon Street
Boston, Massachusetts 02106

Lothrop, Lee & Shepard Co.,
Incorporated
381 Park Avenue South
New York, New York 10016

McGraw-Hill Book Company
330 West 42nd Street
New York, New York 10036

The Macmillan Company
866 Third Avenue
New York, New York 10022

Melmont Publishers, Inc.
1224 West Van Buren Street
Chicago, Illinois 60607

Julian Messner, Inc.
1 West 39th Street
New York, New York 10018

William Morrow & Co., Inc.
425 Park Avenue South
New York, New York 10016

National Voc. Guid. Assoc.
Division of American Personnel
and Guidance Association
1607 New Hampshire Avenue, N.W,
Washington, D. C. 20009

Oxford University Press, Inc.
200 Madison Avenue
New York, New York 10016

Parker Publishing Co., Inc.
West Nyack, New York

Prentice-Hall, Inc.
Englewood Cliffs, New Jersey
07632

G. P. Putnam's Sons
200 Madison Avenue
New York, New York 10016

Rand McNally & Company
Box 7600
Chicago, Illinois 60680

Random House, Inc.
457 Madison Avenue
New York, New York 10022

Science Research Associates
259 East Erie Street
Chicago, Illinois 60611

William R. Scott, Inc.
333 Avenue of the Americas
New York, New York 10014

Charles Scribner's Sons
597 Fifth Avenue
New York, New York 10017

The Viking Press, Inc.
625 Madison Avenue
New York, New York 10022

Henry Z. Walck, Inc.
Publishers
19 Union Square, W.
New York, New York 10003

Franklin Watts, Inc.
845 Third Avenue
New York, New York 10022

Albert Whitman & Company
560 West Lake Street
Chicago, Illinois 60606

STUDENT BIBLIOGRAPHY

Primary

Baker, Eugene. I Want to be a Forester. Children's Press, 1969. $2.25
I Want to be a Beauty Operator. Children's Press, 1969. $2.25
I Want to be a Sales Clerk. Children's Press, 1969. $2.25
I Want to be a Secretary. Children's Press, 1969. $2.25
I Want to be a Taxi Driver. Children's Press, 1969. $2.25

Banks, Marjorie Ann. How We Get Our Dairy Food. Benefic Press, 1964. $2.00
How Foods are Preserved. Benefic Press, 1963. $2.00

Barr, Jene. Mr. Zip and the U.S. Mail. A. Whitman, 1964. $2.25
Miss Terry at the Library. A. Whitman, 1962. $2.25
Good Morning, Teacher. A. Whitman, 1957. N/A
What Will the Weather Be? A. Whitman, 1965. $2.25

Beim, Jerrold. Jay's Big Job. Morrow, 1957. $3.14
Tim and the Tool Chest. Morrow, 1957. $3.78

Beneson, Lawrence. How a House is Built. Criterion, 1964. $2.35

Brown, Bill. Big Rig. Coward-McCann, 1959. N/A

Buchheimer, Naomi. I Know a Teacher. Putnam, 1967. $2.68

Buckley, Helen. Grandmother and I. Lothrop, Lee & Shepard Co., Inc., 1967. $3.36
My Sister and I. Lothrop, Lee & Shepard Co., Inc., 1967. $3.36
Grandfather and I. Lothrop, Lee & Shepard Co., Inc., 1959. $3.36

Burns, William. A World Full of Houses. McGraw, 1953. $4.11

Cameron, Elizabeth. The Big Book of Real Fire Engines. Grosset, 1958. $2.18

Collier, Ethel. I Know a Farm. Wm. R. Scott, Inc., 1960. $3.75

Corbett, Scott. What Makes a Car Go? Little, Brown & Company, 1964. $2.95

Curren, Polly. This is a Town. Follett, 1957. $2.97

Curry, Nancy. My Friend is Mrs. Jones. Bowmar Publishers Corp., 1969. $1.99

Cusman, Jean. We Help Mommy. Golden Press, 1959. $1.69

Dawson, Rosemary & Richard. A Walk in the City. Viking Press, 1950. $3.37

Francoise. What do you Want To Be? Charles Scribner's Sons, 1957. $3.63

Greene, Carla. I Want to be a Fisherman. Children's Press, 1957.
I Want to be a Baseball Player. Children's Press, 1961.
I Want to be a Homemaker. Children's Press, 1961.
I Want to be a Carpenter. Children's Press, 1959.
I Want to be a Road-builder. Children's Press, 1958.
I Want to be a Zoo-keeper. Children's Press, 1957.
I Want to be an Animal Doctor. Children's Press, 1956.
I Want to be a Teacher. Children's Press, 1957.
I Want to be a Fireman. Children's Press, 1959.
I Want to be an Airplane Hostess. Children's Press, 1960.
I Want to be a Mechanic. Children's Press, 1969.
I Want to be a Dentist. Children's Press, 1960.
I Want to be a Doctor. Children's Press, 1958.
I Want to be a Nurse. Children's Press, 1957.
I Want to be a Librarian. Children's Press, 1960.
I Want to be a Postman. Children's Press, 1958.
I Want to be a Scientist. Children's Press, 1961.
I Want to be a Train Engineer. Children's Press, 1956.
I Want to be a Ship Captain. Children's Press, 1962.
I Want to be a Pilot. Children's Press, 1957.
I Want to be a Space Pilot. Children's Press, 1961.
I Want to be a Restaurant Owner. Children's Press, 1959.
I Want to be a Storekeeper. Children's Press, 1958.
$2.25 each

Greene, Carla. Soldiers & Sailors, What Do They Do? Harper, 1963. $2.57
Let's Meet the Chemist. Harvey House, 1966. $4.25
I Want to be a Bus Driver. Children's Press, 1958. $2.57
I Want to be a Truck Driver. Children's Press, 1958. $2.57
Truck Drivers, What Do They Do? Harper & Row, 1967. $2.57
Railroad Engineers & Airplane Pilots, What Do They Do? Harper, 1964. $2.57

Hage, M. K. & Robert Ryan. How Schools Help Us. Benefic Press, 1962. $2.00

Hefflefinger, Jane. About Firemen. Melmont, 1957. $2.25

Hoffman & Hefflefinger. About Friendly Helpers Around Town. Melmont, 1967. $2.25
About Family Helpers. Melmont, 1967. $2.25

Jaynes, Ruth. Do You Know What? Bowmar, 1967. $1.99

Joslin, Sesyle. What Do You Do, Dear? Addison-Wesley Publishing Co., 1961. $2.95

Lenski, Lois. Cowboy Small. Oxford, 1949. $2.44
At Our House. Walck, 1959. $1.47

Lindman, Mai. Snipp, Snapp, Snurr and the Big Farm. A. Whitman, 1946. $2.50

Kessler, Ethel & Leonard. Do Baby Bears Sit in Chairs? Doubleday and Co., 1961. $3.50

Klagsbrun, Francine. Read About the Teacher. Watts, 1970. $3.75

McCabe, Sybril A., How Communications Help Us. Benefic Press, 1964. $2.00
How Printing Helps Us. Benefic Press, 1964. $2.00

McCall, Edith. How We Get Our Cloth. Benefic Press, 1964. $2.00
How We Get Our Clothing. Benefic Press, 1961. $2.00
How Airplanes Help Us. Benefic Press, 1961. $2.00

Meeker, Alice M. How Doctors Help Us. Benefic Press, 1964. $2.00
How Hospitals Help Us. Benefic Press, 1962. $2.00

Meshover, Leonard. You Visit a Post Office, Telephone Company. Benefic Press, 1970. $2.00

Meuer, William. How Farms Help Us. Benefic Press, 1970. $2.00

Payton, Evelyn. About Farm Helpers. Melmont, 1967. $2.25

Pitt, Valerie. Let's Find Out About the City. Watts, 1968. $3.75
Let's Find Out About the Family. Watts, 1970. $2.21
Let's Find Out About Clothes. Watts, 1967. $3.75

Pfloog, Jan. The Farm Book. Golden Press, 1964. $3.19

Provus, Malcomb. How Families Live Together. Benefic Press, 1963. $2.00
How We Get Our Shelter. Benefic Press, 1962. $2.00
How We Travel on Land. Benefic Press, 1962. $2.00
How We Travel in Water. Benefic Press, 1962. $2.00
How Weather Affects Us. Benefic Press, 1963. $2.00

Radlouer, Ruth. About Men at Work. Melmont, 1967. $2.25

Schroeder, Glenn & Lillian Colonius. At the Library. Melmont, 1967. $2.06

Shapp, Martha Let's Find Out About Firemen. Watts, 1962. $3.75

Smith, Robert P. When I Am Big. Harper, Row, 1965. $2.57

Slobodkin, Louis. Read About Postmen. Watts, 1966. $3.75
Read About the Policemen. Watts, 1966. $3.75
Read About the Firemen. Watts, 1967. $2.68
Read About Busmen. Watts, 1967. $3.75.

Stanek, Muriel. How People Earn and Use Money. Benefic Press, 1968. $2.00
How Our Government Helps Us. Benefic Press, 1969. $2.00

Stanek, Muriel. How Rules and Laws Help Us. Benefic Press, 1969.
$2.00
How People Live in the Big City. Benefic Press, 1961.
$2.00
How People Live in the Suburbs. Benefic Press, 1970.
$2.00
How We Use Maps and Globes. Benefic Press, 1968. $2.00

Sutton, Felix. Big Treasure Book of Wheels. Grosset, 1953. $2.18

Verral, Charles. Go! The Story of Outer Space. Prentice, 1962. $2.51

Williams, Barbara. I Know a Fireman. Putnam, 1967. $2.68
I Know a Policeman. Putnam, 1966. $2.68

Wright, Ethel. Saturday Walk. W. R. Scott, Inc., 1969. $2.50

Zion, Gene. Dear Garbage Man. Harper & Row, 1957. $3.11

Zocks, Irene. Space Alphabet. Prentice, 1964. $2.65

STUDENT BIBLIOGRAPHY

Intermediate

Adler, Irving. *Coal*. John Day, 1965. $2.85

Oceans. John Day, 1962. $2.86

Baker, Eugene. *I Want to be an Architect*. Children's Press, 1969. $2.25

Barr, Jene. *Baseball for Young Champions*. McGraw-Hill, 1956. $3.83

Football for Young Champions. McGraw-Hill, 1958. $3.83

Beeler, Nelson F. *Experiments in Chemistry*. Crowell, 1952. $2.65

Buchheimer, Naomi. *Let's Go To The Library*. G. P. Putnam's Sons, 1957. $2.43

Let's Go To The Telephone Company. G. P. Putnam's Sons, 1968. $2.43

Bushy, Edith. *Behind the Scenes at the Library*. Dodd, Mead, and Co., 1960. $2.99

Cooke, David. *Better Baseball for Boys*. Dodd, Mead, and Co., 1959. $3.23

Behind the Scenes in TV. Dodd, Mead, and Co., 1967. $2.99

Corbett, Scott. *What Makes a Car Go?* Little, Brown & Company, 1964. $2.95

Crosley, Alexander. *Rockets Into Space*. Random, 1959. $2.49

Dietz, Betty Warner. *You Can Work in the Communications Industry*. The John Day Co., 1970. $3.96

Feagles, Anita. *Casey, the Utterly Impossible Horse*. Addison-Wesly, 1960. $2.21

Garelick, May. *Double Trouble*. E. M. Hale & Company, 1963. $2.35

Greene, Carla. I Want to be a Coal Miner. Children's Press, 1957. $2.25

Keen, Martin. The How and Why Wonder Book of Chemistry. Grosset-Dunlap, 1961. $2.19

Meyer, Jerome. Picture Book of the Sea. Lothrop, Lee & Shepard, 1956. $3.25

Norling, Jo and Ernest. Pogo's Mining Strip. Holt, 1945. $2.92
Pogo's Oil Well. Holt, 1955. $2.92

Randall, Florence. Getting a Job. Fearon Publishers, 1966. $2.50

Schneidu, Herman & Nina. Your Telephone and How it Works. McGraw-Hill Book Co., 1965. $2.85

Shiffer, Don. The First Book of Basketball. Watts, 1959. $3.95
The First Book of Football. Watts, 1958. $3.75

Simpson, Wilma Willis. About News and How it Travels. Melmont, 1960. $2.25

Waller, Leslie. Weather. Holt, 1959. N/A

Zoloton, Charlotte. The Quarreling Book. Harper, 1963. $2.19

Intermediate

(Definitive and in-depth feedback on the following books has not yet been obtained.)

Barnett, Leo. Careers in Computer Programming. Walck, 1967. $3.75

Belich, Alan R. Your Career in Medicine. Messner, 1964. $3.75

Boylan, James R. School Teaching as a Career. Walck, 1962. $3.75

Cohn, Angelo. Careers with Foreign Languages. Walch, 1963. $3.75

Compton, Grant. What Does a Veterinarian Do? Dodd, 1964. $3.75

Dobrin, N. & A. About Foresters. Melmont, 1962. $2.25

Donohue, Jody. Your Career in Public Relations. Messner, 1967. $3.75

Gordon, George N. Your Career in TV and Radio. Messner, 1966. $3.75

Hamilton, Lee David. Let's Go to a Dam. Putnam, 1963. $2.25
Let's Go to West Point. Putnam, 1962. $2.25

Herbert, Fred W. Careers in Natural Resource Conservation. Walck, 1965. $3.75

Hirschfeld, Burt. Your Career in Theatre! Messner, 1963. $3.75

Hyde, Wayne. What Does a Cowboy Do? Dodd, 1963. $2.75
What Does a Diver Do? Dodd, 1961. $2.75
What Does a Parachutist Do? Dodd, 1960. $2.75
What Does a Secret Service Agent Do? Dodd, 1962. $2.75

Kaplan, Albert A. Careers in Department Store Merchandising. Walck, 1962. $3.75

Koestler, Frances A. Careers in Social Work. Walck, 1965. $3.75

Landin, L. *About Cowboys Around the World*. Melmont, 1963. $2.25

Lapp, Carolyn. *Dentists' Tools*. Lerner, 1961. $2.75

Lavine, David. *What Does a Peace Corps Volunteer Do?* Dodd, 1964. $2.75

Lerner, Marguerite Rush. *Doctor's Tools*. Lerner, 1960. $2.75

Liston, Robert A. *Your Career in Law Enforcement*. Messner, 1965. $3.75

Logsdon, Richard H. *Library Careers*. Walck, 1963. $3.75

Mann, Roland. *Careers in Business Management*. Walck, 1963. $3.75

Mergendahl, T. E. *What Does a Photographer Do?* Dodd, 1965. $2.75

Nathan, Raymond. *Careers in Airlines Operations*. Walck, 1964. $3.75

Newman, S. and Sherman D. *About the People Who Run Your City*. Melmont, 1963. $4.25

Peyton, D. E. *About Farm Helpers*. Melmont, 1958. $2.25

Rees, E. *At the Bank*. Melmont, 1959. $2.25

Sootin, Laura. *Let's Go to a Police Station*. Putnam, 1957. $2.75

Wachs, Theodore. *Careers in Research Science*. Walck, 1961. $3.75
Careers in Engineering. Walck, 1964. $3.75

Ward, John Owen. *Careers in Music*. Walck, 1968. $3.75

Wells, Robert. *What Does an Astronaut Do?* Dodd, 1961. $2.75

STAFF RESOURCES

Aubrey, Ruth H. Selected FREE Materials for Classroom Teachers. Fearon Publishers, 1969. $2.00

Baer, Max F. and Edward C. Roeber. Occupational Information: The Dynamics of Its Nature and Use. 3rd ed. Science Research Associates, 1964. $8.00

Bossung, Esther L. The World of Work, Vocational Education in Elementary Schools. Instructional Materials Center, Louisville, Kentucky: Louisville Board of Education, December 15, 1969.

Bottoms, Gene & Kenneth B. Matheny. A Guide for the Development, Implementation, and Administration of Exemplary Programs and Projects in Vocational Education. Atlanta, Georgia: September, 1969.

Bureau of Vocational Education. Kentucky Handbook for Planning and Evaluating Local Vocational Education Programs. Frankfort, Kentucky: State Department of Education, 1970.

Chesler, Mark and Robert Fox. Role-Playing Methods in the Classroom. Science Research Associates, 1966. $1.60

Department of Education. That Wonderful Year, A Conceptual Language Approach to Learning in the Kindergarten. Augusta, Maine: Department of Education, November, 1968.

Division of Guidance & Testing. Sources of Elementary Guidance Materials. Columbus, Ohio: State of Ohio Department of Education, March, 1968.

Division of Guidance Services. Guidance in the Elementary School. Frankfort, Kentucky: Dept. of Education, 1969.

Division of Vocational Education. Career Development, Increasing the Vocational Awareness of Elementary School Children. Trenton, New Jersey: Dept. of Education. $3.35

Division of Vocational Education. Technology for Childrens Projects. Trenton, New Jersey: Dept. of Education.

Dunn, Charleta J. and Bill T. Payne. World of Work: Handbook of Occupational Guidance in the Elementary Grades. Dallas, Texas: The Leslie Press, 1971.

Education Progress Service Inc., Randolph, Wisconsin: 1971.
Elementary Teachers Guide To Free Curriculum Materials. $9.75
Educators Guide to Free Films. $10.75
Edncators Guide to Free Filmstrips. $8.50
Educators Guide to Free Guidance Materials. $8.75
Educators Guide to Free Social Studies Materials. $9.50

Feingold, Dr. S. Norman. A Starter File of Free Occupational Literature. Washington, D. C.: B'nai B'rith Vocational Service, 1970. $1.50

Guidance Services Section: Sources of Occupational Information. Columbia, Missouri: Department of Education, 1965.

Hunt, Ruth. I Want to be .....Books. Children's Press, 1966. $1.50

Joint Council of Economics.. Learning Economics Thru Children's Stories, Bibliography for Grades K-3. New York, New York: Joint Council of Economics, 1969.

Knapp & Bedford. The Parent's Role in Career Development. National Vocational Guidance Association, 1967.

Laws, Lee. Elementary Guide for Career Development. Grade 1-6. Austin, Texas: Education Service Center, Region 13.

Mager, Robert E. and Kenneth Beach Developing Vocational Instruction. Fearon Publishers, Lear Siegler, Inc., Education Division, 1967. $2.00

Minneapolis Public Schools. Economics in Elementary School. Why? What? Where? Minneapolis, Minnesota: 1967.

N.D.E.A. Institute for Advanced Study. Construction: Industrial Arts for the Elementary School, K-2/3-4/5-6. Columbus, Ohio: The Ohio State University, 1968.

Norris, Willa. Occupational Information in the Elementary School. Science Research Associates, 1968.

Occupational Information Materials Project. A Selected Bibliography of Occupational Literature for Grades 3-8. Atlanta, Georgia: Atlanta Public Schools, 1970.

Platt, A. H. Room to Grow: Something Special for All Kids. Philadelphia School District, Philadelphia, Pa.: 1969.

Smith, Lee L. A Practical Approach to the Nongraded Elementary School. Parker Publishing Co., Inc., 1971.

Tennyson, Soldahl and Mueller. The Teacher Role in Career Development. National Vocational Guidance Association, 1965. $1.90

492 Ways to Use Newspapers in the Elementary Classroom. 1965
525 Ways to Use a Newspaper to Motivate Students With Learning Difficulties. 1970
Courier Journal & Louisville, Times, 6th & Broadway, Louisville, Ky.

"I DIDN'T KNOW THERE WERE SO MANY OTHER PROJECTS!"

A NATIONAL OVERVIEW OF SELECTED CAREER EDUCATION PROGRAMS

For further information about the following programs and/or request for curriculum guides contact:

John W. Mandell, Coordinator
Project World of Work
Contoocook Valley Regional
High School
Route 202, North
Peterborough, New Hampshire
03458

Robert W. Schreiber, Director
Mid-Hudson Career Development
and Information Center
88 Sargent Avenue
Beacon, New York 12508

Mrs. Eva Pumphrey
Director of Curriculum
Anne Arundel County Public Schools
Box 951
Annapolis, Maryland 21404

Mr. R. G. Lamping, Director
Pittsburgh Public Schools
Division of Occupational,
Vocational & Technical Education
635 Ridge Avenue
Pittsburgh, Pennsylvania 15212

Dr. Benjamin Willis
Superintendent of Schools
The School Board of Broward County
1320 Southwest Fourth Street
Fort Lauderdale, Florida 33312

Mr. Lewis Johnson
Superintendent of Schools
1805 Second Street
Henderson, Kentucky 42420

Mr. Dalton Anthony
Project Director
New Albany City Schools
P.O. Box 771
New Albany, Mississippi 38652

George F. Meyer, Director
New Brunswick's Career Education
Program
New Brunswick Public Schools
83 Livingston Avenue
New Brunswick, New Jersey 08901

Joseph L. English, Project Director
Delaware's Occupational-Vocational
Education Model
Lakeview Avenue
Milford, Delaware 19963

Mr. E. Niel Cary, Project Director
Maryland State Department of
Education
600 Wyndhurst Avenue
Baltimore, Maryland 21210

Herbert B. Holstein, Project
Director
Vocational Education
Lincoln County Schools
P.O. Box 437
Hamlin, West Virginia 25523

Mr. Joel Smith, Project Director
P.O. Drawer "R"
Marietta, Georgia 30060

Dr. John D. Jenkins, Director
Pikeville Independent School District
Eastern Kentucky University
Richmond, Kentucky 40475

Mr. Monte B. Ross
Apex High School
Apex, North Carolina

Mr. Gil Woolard, Director
Kershaw Area Vocational School
Camden, South Carolina

Mr. Sam Wooten, Director
Box 218
Ruby, South Carolina 29741

Mr. John Freeman, Superintendent
Memphis City School District
2597 Avery Avenue
Memphis, Tennessee 38112

Mr. Robert Rochow, Program Director
Pontiac Vocational Career Development Program
Pontiac Public School System
1351 North Perry Street
Pontiac, Michigan 48058

Mr. Nick Topougis
Coordinator of Career Programs
70 North Broadway
Akron, Ohio 44308

Mr. Michael A. Zockle
Career Program Coordinator
Warren City Schools
261 Monroe Street, N.W.
Warren, Ohio 44482

Mr. Marvin Stokes
Superintendent of Schools
Route 3
Ada, Oklahoma 74820

Dr. Bertram Caruthers, Sr.
Project Director
Unified School District #500
625 Minnesota Avenue
Kansas City, Kansas 61101

Mr. J.B. Morris
Las Animas Schools, Bent School District
1214 7th Street
Las Animas, Colorado 81054

Mr. Alfred W. Koch, Local Director
Carbon County School District #3
Rawlins, Wyoming 82301

Mr. Bruce Hinton, Local Director
Director of Vocational Education
Knox County Board of Education
400 W. Hill Avenue
Knoxville, Tennessee 37902

Dr. Haron J. Battle
Assistant Superintendent
620 E. 10th Place
Gary, Indiana 46402

Mr. Joe Freeman
Morrison Co. Education Coop.
1000 NE 1st Avenue
Little Falls, Minn. 56345

Dr. Tom Scherer, Local Director
Toledo Public Schools
Toledo, Ohio

Mr. Richard Nelson, Superintendent
2230 Northwestern Avenue
Racine, Wisconsin 53404

Dr. Callie Smith, Superintendent
Harlandale Independent School District
102 Genevieve
San Antonio, Texas 78214

Mr. Ernest J. Coleman
Lawrence Unified School District #497
2017 Louisiana
Lawrence, Kansas 66044

Dariel Clark, Superintendent
Morlan & Gordon Streets
Holyoke, Colorado 80734

Mr. Rober Bauer
Helena Vocational-Technical Center
1115 Roberts
Helena, Montana 59601

Dr. M. Robert Adkison, Superintendent
P.O. Box 307
Ceres, California 95307

Mr. Clayton D. Carlson
Local Director
Career Development Project
435 10th Avenue, N.W.
Watertown, South Dakota 57201

Mr. William E. Lewwllen
Superintendent
525 Mill Street
Springfield, Oregon 97499

Dr. Robert C. Roberts, Superintendent
Renton School District #403
435 Main Avenue, S.
Renton, Washington 98055

Adalberto Aguilar, Supervisor
Model Cities Exemplary Vocational Program
Tucson Public Schools
P.O. Box 4040
Tucson, Arizona

Mr. Don Bauthues, Director
Vocational Education
109 E. Pioneer Street
Puyallup, Washington 98371

SELECTED LIST OF REFERENCES TO NON-COMMERCIAL CAREER EDUCATION CURRICULUM/INSTRUCTIONAL MATERIALS

1. Source: University of Florida
Department of Vocational Education
Gainesville, Florida

Title: "Fusion of Applied and Intellectual Skills" (FAIS)

Summary: These materials are designed to be integrated into the existing curriculum at grades K-5. Content emphasis is on self-awareness, educational awareness, and occupational awareness. The materials have been pilot tested with particular success in generating student interest in analyxing attitudes toward various occupations.

2. Source: Muskego Public Schools
Muskego, Wisconsin

Title: "Career Development"

Summary: Grades K-6 are covered. The materials are intended to be integrated into the language arts, social studies, and health curricula. The program is built on 10 broad concepts intended to provide students with occupational information and to broaden and develop self awareness, economic awareness, and basic career skills and knowledge.

3. Source: Pikeville School District
Pikeville, Kentucky

Title: "Career Education Materials Guide"

Summary: Intended for grades K-6, this material includes detailed lesson plans with stated purposes, suggested activities, resource requirements, and evaluation methods. Focus is on the family, neighborhood, and the city at grade levels 4-6. The development of occupational awareness and related information relevant to career clusters are covered.

4. Source: State Department of Education
Vocational Education Division
Cheyenne, Wyoming

Title: "Teacher's Guide for Acreer Education"

Summary: This guide is designed for grades K-6. It emphasizes integrating career education into all subjects of the curriculum. A career related activity is planned monthly at every grade level. The program has stated objectives and suggestions for year-end evaluation of pupil progress. The materials are based upon 23 concepts which are reinforced vertically and horizontally.

5. Source: Dr. Marla Peterson
Eastern Illinois University
Charleston, Illinois

Title: "OCCUPAC Project and Packages"

Summary: A report of this project is available. When completed, separate kits of materials covering various occupations will be available either commercially or from Eastern Illinois University. The ultimate objective of this project is to develop materials spanning grades K-9. Each OCCUPAC will contain filmstrips, printed materials, and small objects for hands-on-experiences related to each of the occupations. Several kits are presently undergoing field tests.

6. Source: Dr. Walter Wernick
Northern Illinois University
Dekalb, Illinois

Title: "The World of Work as an Organizing Center for the Curriculum of the Elementary School"

Summary: These materials have an in-service training component designed for elementary and intermediate teachers charged qirh developing resource units related to the world of work. This project emphasizes the interview as the focal point for organizing curriculum.

7. Source: Arkansas Department of Education
Little Rock, Arkansas

Title: "Guide for Vocational Orientation and Career Awareness"

Summary: Career exploration related to self and economic awareness and occupational preparation is organized in three broad areas: business education, home economics, and industrial education. The following guides are part of this program: Career awareness (grades K-6); and vocational orientation (grades 7-9).

8. Source: Genessee Intermediate School District
Flint, Michigan

Title: "Career Information System"

Summary: This material contains information needed for developing a computer based career information system.

9. Source: Bismarck School District
Bismarck, North Dakota

Title: "Career Development K-12 program"

Summary: This material is organized around conceptual themes. The material takes the approach that career development should be integrated into the over-all curriculum.

10. Source: Multnomah County School District
Portland, Oregon

Title: "Project Vigor: Elementary Grades"

Summary: A career education teacherguide and three supplementary units oriented to grades 1-6.

11. Source: Education Service Center
Region XIII
Austin, Texas

Title: "Elementary Guide for Career Development"

Summary: Materials include a teacher's guide and a set of transparencies for use in grades 1-6. Many activities are listed, along with numerous resource citations.

12. Source: Hamlin School District
Hamlin, West Virginia

Title: Exemplary Project

Summary: Curricular units are developed for grades one through six. Suggested activities will assist in developing self and occupational awareness. Suggested evaluation strategies and techniques are contained as a separate unit.

13. Source: Racine School District
Racine, Wisconsin

Title: "Career Development Guidelines"

Summary: This guide is intended to be used with grades 4-9. Statements of learning activities necessary to advance 16 major concepts related to career education are provided. Resources required to support classroom activities are defined.

14. Source: Tulsa Public Schools
Tulsa, Oklahoma

Title: "Career Development Elementary Education Program"

Summary: Materials consist of 12 career development units for grades 5-6. Activities for pupils and performance objectives are identifies. Material can ve used as an enrichment unit in existing curricula.

15. Source: Tulsa Public Schools
Tulsa, Oklahoma

Title: "Bibliography: In-Service Guide for Teachers and Counselors.

Summary: A handbook of in-service materials which contains ideas and recommendations at grades 5-12 for teachers and counselors.

16. Source: Pharr-San Juan-Alamo School District
Platt, Texas

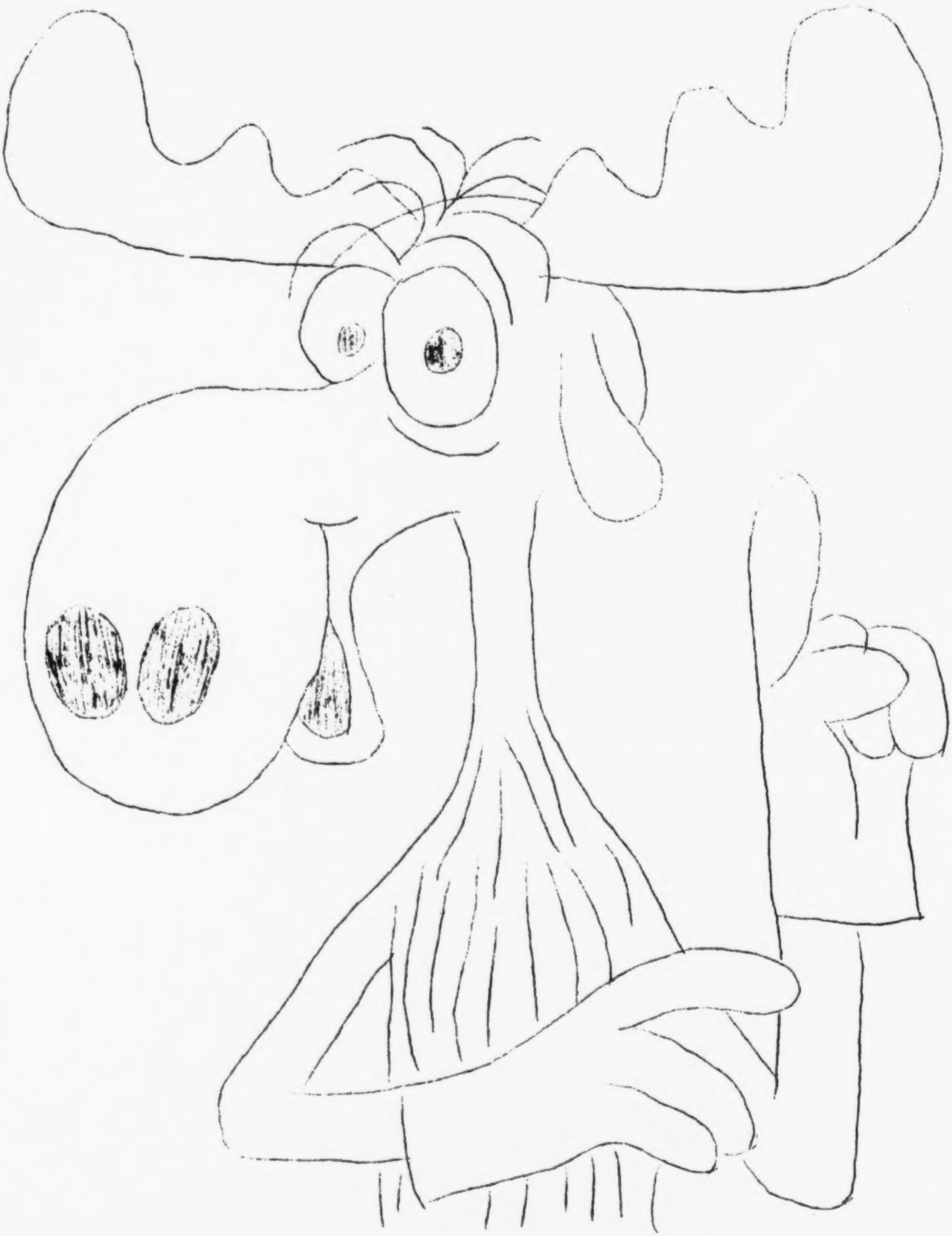
Title: "A Guide for Occupational Orientation"

Summary: This teacher's guide covers measurable objectives, suggested learning activities and reource requirements for developing self awareness and occupational awareness at grades 5 and 6. The material covers 26 occupations by job families and job finding skills.

17. Source: Pittsburgh Public Schools
Pittsburgh, Pennsylvania

Title: "OVT Exploratory Program"

Summary: Career awareness, decision-making skills, and entry level occupational skills are emphasized in these materials. The materials are intended to introduce students in grades 6-8 to the world of work using a variety of approaches to guidance and instruction. The materials will be useful as a curriculum enrighment reource.



"NOW, THE FIRST THING. . . . !"

THE WHITE HOUSE

STATE OF THE UNION MESSAGE

OF

PRESIDENT RICHARD NIXON
TO BE PRESENTED TO THE MEMBERS
OF THE SECOND SESSION
OF THE 92nd CONGRESS
January 20, 1972

TO THE CONGRESS OF THE UNITED STATES:
(Excerpt)

A New Emphasis on Career Education

Career education is another area of major new emphasis, an emphasis which grows out of my belief that our schools should be doing more to build self-reliance and self-sufficiency, to prepare students for a productive and fulfilling life. Too often, this has not been happening. Too many of our students, from all income groups, have been "turning off" or "tuning out" on their educational experiences. And---whether they drop out of school or proceed on to college---too many young people find themselves unmotivated and ill equipped for a rewarding social role. Many other Americans, who have already entered the world of work, find that they are dissatisfied with their jobs but feel that it is too late to change directions, that they already are "locked in."

One reason for this situation is the inflexibility of our educational system, including the fact that it so rigidly separates academic and vocational curricula. Too often vocational education is foolishly stigmatized as being less desirable than academic preparation. And too often the academic curriculum offers very little preparation for viable careers. Most students are unable to combine the most valuable features of both vocational and academic education; once they have chosen one curriculum, it is difficult to move to the other.

The present approach serves the best interests of neither our students nor our society. The unhappy result is high numbers of able people who are unemployed, under-employed, or unhappily employed on the one hand---while many challenging jobs go begging on the other.

We need a new approach, and I believe the best new approach is to strengthen Career Education.

Career Education provides people of all ages with broader exposure to and better preparation for the world of work. It not only helps the young, but also provides adults with an opportunity to adapt their skills to changing needs, changing technology, and their own changing interests. It would not prematurely force an individual into a specific area of work but would expand his ability to choose wisely from a wider range of options. Neither would it result in a slighting of academic preparation, which would remain a central part of the educational blend.

Career Education is not a single specific program. It is more usefully thought of as a goal---and one that we can pursue through many methods. What we need today is a nationwide search for such methods---a search which involves every area of education and every level of government. To help spark this venture, I will propose an intensified Federal effort to develop model programs which apply and test the best ideas in this field.

There is no more disconcerting waste than the waste of human potential. And there is no better investment than an investment in human fulfillment. Career Education can help make education and training more meaningful for the student, more rewarding for the teacher, more available to the adult, more relevant for the disadvantaged, and more productive for our country.

Speech-Bowling Green City Schools
July 19, 1971 - 10:00 AM
Dean Tate Page
Western Kentucky University

THE WORLD OF WORK

I. An educational experience is one that leaves the learner better for for having had it.

  A. This definition is mine and leaves one with the question "better for what?"

    1. The obvious answer is, better to be of use to himself, and more important by far, is that he better serve the many worthwhile social groups of which he is a member.

      a. Examples of these essential groups are:

        the home,
        the church,
        community civic organizations,
        a patriotic citizen of the nation.

      b. One cannot be useful to any of these groups unless one can carry his share of civilizations' load.

      c. This implies he must make a worthwhile work contribution and receive a living wage for himself and his family.

        (1) Unless this vocational significance is recognized we will all continue to be taxed to support those who cannot or will not cope with their work environment.

  B. It has been said, and I support the concept, that man makes three significant decisions in life.

  The first - choice of the moral and ethical concepts and standards by which to live.

  The second - choice of his life's work.

  The third - choice of a mate.

1. It is unbelievable how little attention the people's schools have given these decisions.

2. If you are willing to take time to ponder the problem you will find most of the human wreckage in this community and in this once truly great nation have resulted from individuals unable to cope satisfactorily with one or more of the three critical decisions of life.

3. If this is true, and I'm convinced it is, it would seem high time we in education come to grips with these enemies of human satisfaction, and destroyers of the nation's greatness.

4. There is no point in launching a half-hearted educational attack on these problems unless each of you honestly believe we can and have identified the enemy and you do, and will take the time to plan and act.

5. If you believe, as I do, that it is the job of -

    a. all education to aid each person achieve individual satisfaction, and group status,

    b. and that this may be done best by aiding the individual to learn to cope satisfactorily with the three suggested basic problems of man, we can plan an attack on one or more of these enemies of man.

II. May I give additional proof of the point of view, this time from others.

A. Governor James A. Rhodes in his book, Alternative to a Decadent Society, emphasizes that when a society begins to degrade work that society is beginning the process of rot.

1. He lists as danger signals in our society - unemployment, welfare, and lack of salable skills.

2. Governor Rhodes found in a study of 57,116 sophomores and juniors from 205 high schools that 72.6% desired vocational programs.

3. My own studies have indicated no less than 2/3 of those of high school age would profit most from a harmonious blending of general education programs and vocational oriented learnings.

4. Possibly some of you have heard me emphasize that our present programs of education help about 1/3, hurt about 1/3, and the other 1/3 are neither helped nor hindered.

    a. The governor's work based on quoted studies confirms my thinking.

5. In Ohio 90% of the youth cannot present skills the market will buy.

   a. As high as 90% of those who register in the Ohio unemployment office are untrained, unskilled, and unemployable.

6. Some lines I wrote some five years ago may help.

   We have outrun sound,
   Harnessed the complex and awesome power of the atom.
   Explored the moon,
   But are unable to develop
   Educational programs that aid the young
   Become useful to self and society.

7. The governor blames the educational system at all levels, not the teacher and educational leader, and maintains the system is unable to change because of intellectual snobbery on the part of a few both outside and within the schools.

8. 50% of those entering Ohio colleges will not complete the program or develop marketable skills, but will develop negative attitudes toward the schools and society.

9. The governor believes that only educational commitment and action can save this country.

   a. It is my conviction he is right and our differences, if any, would be the "how to do it."

10. In the school year of 1965-66 in Ohio the following was true:

Entering the first grade	100	
Entering the 9th grade	95	- lost 5
Graduating from high school	76	- lost 24
Entering college	32	- lost 68
Returning second year	23	- lost 77
Returning third year	21	- lost 79
Graduating from college	14	- lost 86

11. The governor gave the college a goodly share of the blame for perpetuating the educational snobbery that is inherent in the subject centered programs of colleges and secondary schools.

12. He strongly urges those of us in education to become student centered and goal centered in program planning for more functional learning.

13. It is my conclusion the new move toward educational accountability will force all of us to take a harsh look at our responsibilities to the people that pay our salaries, for results in terms of all the children and not just 14 out of 100 that finish college.

14. If you are serious about the educational crisis in this country, read the Eight Year Study, and Orville Young's study Vocational Courses for College Bound.

    a. Both studies will reassure you regarding those who have had such courses and successfully are going to college.

B. A group making a study of Kentucky's educational system will soon make recommendations, probably as follows:

First - A task force be appointed to study in depth, the educational needs of all the people of the state, and the programs of education from nursery school through higher education.

Second - Extension of the vocational programs to meet the needs of all the people, and that our present trade schools become more oriented to beyond high school youth.

Third - That career education be made a part of both elementary and secondary educational programs.

Fourth - Guidance be made more relevant to the needs of all the students.

Fifth - That business and industry become more involved in these programs through advisory councils, seminar participations, participation in programs, aid in program planning, cooperative programs of shared responsibilities, and other relevant activities.

Sixth - That a comprehensive information system be developed reflecting man power needs and educational programs respond accordingly to the needs of the people.

Seventh - That the problems and programs for rural America be studied and updated.

Eighth - That leaders be prepared for these new ventures in education, and that emphasis be given to preparing leaders for the rural areas.

C. One other quote, this time from the Encyclopedia of Educational Research:

"Proponents of the various acts risk making over-generalizations, but they tend to believe that (1) the American high school has failed in its democratic purpose, that of serving all Americans, (2) secondary and higher education persist in aligning to an aristocracy of learning, a cleavage of general versus vocational education, a built-in casualty risk for dropouts, (3) occupational programs take an unnecessarily long time to complete, (4) for many Americans the curriculum is an impoverished one, (5) the basic role of vocational education should be more than the training of persons for employment, and, finally, (6) numerous Americans are unemployed because of lack of opportunity for preparation." (1509)

III. World of Work Programs

A. Nothing in today's world has so much potential for human success and human tragedy than our attitudes toward, and programs concerned with the world of work.

B. Either the public schools will rise to this challenge or be by-passed and there will be a parallel system, probably federally developed.

1. The one thing I'm sure of is that the occupational educational emphasis is going to be done by someone now and in the future.

2. To me it would be educational tragedy for a democracy to end up with two systems of public education, one respectable and the other considered for second class citizens.

3. It is ironically tragic to give work, which made this country great, second rate status.

4. My conclusions are -

First - That all useful work is honorable and worthy of educational attention and emphasis by all teachers at all levels of education.

Second - That there are to be world of work programs in education done by someone.

Third - My conviction is, it would be a great educational tragedy to let this segment of education be developed outside the public schools.

Fourth - All public school students need world of work orientation, half or more need to develop the attitudes, skills, habits and knowledge necessary to make a living.

C. Quoting from an address given 1,000 social workers in 1970 in which the threats to man were being emphasized, (quote): "The problem of the non-functionals in the social order is a threat to both the social order and to great numbers of individuals.

1. It is the responsibility of the public to work with the less functional and the non-functional as hard as with the most able.

2. There's 20% of the working age group unable to cope with their environments, including jobs."

3. In the same speech I quoted some lines I entitled Killer.

"The economy can afford dole,
The social order cannot.
Psychologically,
It is an initiative killer,
Destroyer of human dignity,
Reducing the recipient to slavery."

4. There's no scarcity of work.

    a. In Kentucky there's millions of acres that need reforesting.

    b. Enough to keep all able-bodied, unemployed males of Kentucky working for the next 25 years.

    c. The problem basically is in the attitudes of parents and teachers toward work, and they pass on to youth regarding work and programs that prepare you for work.

5. May I suggest most strongly that it is high time we began at the first grade level to teach the worth and dignity of all useful work.

    a. The hour is late but it will be later tomorrow, if tomorrow comes to the world we know.

D. The National Advisory Council on Vocational Education created by Congress in 1968 with its 21 members appointed by the President has spoken through 5 reports.

1. Each serious minded American should read them.

2. If those of you here today are seriously concerned with the welfare of this country you should study them and let them change your programs.

3. Hopefully, these reports will affect attitudes and educational programs.

4. Significantly, report one dealt with the national attitude toward vocational education as "a system designed for someone else's child."

5. Report 2 dealt with federal funding to reduce the flow of untrained into unemployment pools.

6. Report 3 dealt with employment as an integral part of the educational scheme.

7. Report 4 dealt with local support, state plans, lack of federal initiative, etc.

8. Report 5 - this report examines the forces that have minimized the import of the four previous reports on education.

9. The councils mood is one of impatience, but senses the mood of the public is punitive toward education.

10. In report 5 the council asks the question, "Is anyone listening to the voices of the people?"

    a. To the forty million elementary children who need career orientation.

b. To the 7½ million that seek jobs after graduation.

c. To the 750,000 high school and college dropouts, virtualy all without marketable skills.

d. To the 2,000,000 returning veteran, the unemployed resulting from changing technology, the highly motivated employed below their potential, the inmates of our prisons.

11. In a talk recently to 200 college level educators I stressed "give all the schools back to the people or look elsewhere for money."

IV. I have given you my own thinking and the thinking of others regarding the educational need for a program emphasis on the world of work.

A. You are moving in the right direction in your program but I would strongly recommend the theme be extended both downward and upward.

B. May I give you some of the thinking I have used in Washington and out of state speaking regarding world of work emphasis in the public schools.

1. First, no change can take place in your educational programs, or anywhere else, unless there is a deep attitudinal feel of the need for action on the part of teachers, administrators, parents, and children.

a. All action, good or bad, is proceeded by attitudinal changes.

b. Unless there is a total commitment to the world of work venture it will fall in your schools and across the nation.

2. Second, it has been my strong conviction that there must be a change in the attitudes of teachers and in educational programs beginning in the first grade and extending through graduate schools.

a. If teachers and their programs emphasize the significance of the world of work as it relates to the home and the community it is possible to place work in a respectable context.

b. Part of this educational effort to stabilize the nation must be carried out in field trips where elementary children visit parents in their work.

c. Ask yourself how you may change the attitudes of pupils toward work and toward programs that prepare them for the work.

3. Third, it has always been said that the junior high school is the place to sample widely of learnings.

a. If the learners have received the significance of work emphasis in the elementary school they will be ready to sample widely of both general education and from a variety of vocational experiences.

b. It is a time to sample, experiment, and find a sense of direction for one's life.

c. Hopefully, that sense of direction will include wise choices regarding choice of work and programs that aid in achieving these goals.

d. In one of my educational schemes I stressed the concept of a junior high job corp.

(1) It was to be held in a camp and largely based on vocational learnings and public service activities.

4. Fourth, all programs in high school should give emphasis to the significance of work skills for the individual and for the society.

a. High school is terminal for over half the students and their need for job preparation is urgent.

(1) If the elementary school and the junior high has been effective in its shaping of attitudes, general skills, and appropriate goals, the students will be ready for work preparation programs.

b. Hopefully, many of those in vocational activities will be in cooperative programs with industry, business, or government agencies.

c. At some point in their high school attitudes and skills preparation it is a hope that a payment from the cooperative agency can be paid the individual.

(1) No male can walk upright with self-respect until he has earned a pay check through his efforts and as a reward for merit.

C. You have not gone all the way in your plans but you have taken a step in the right direction.

1. Your way will not be an easy one to carry out.

2. Many of you will have doubts about the wisdom of the action.

3. You may fail but it is an urgently needed step in terms of the individual student, this community and this nation.

4. I personally stand ready to assist in any way possible.

5. If we cannot restore to this community the goodness of work attitudes and skill so necessary for a technological nation, our society is in its final stages and will decay like the 19 great civilizations that have preceded us.

Wilson Glenn Collins
Friday
June 23, 1972
Henderson Community College
Owensboro Region Career
Education Workshop

PRESENTATION

My topic is Followup and Revision of Curriculum materials.

The IML (CDC) has, in the past done only limited followup and formal evaluation of curriculum materials developed When materials needed revision, one of our major procedures was to involve teacher committees in determining the objectives for the new (or revised) materials. Many of you have no doubt served on such committees. This was evaluation (followup) in a quite elemental sense. Such evaluation was of a very informal, subjective nature. Teachers were frequently asked their opinion of materials, and such results were utilized in a very subjective sense by the various specialists as they developed materials.

I do not want to leave you with the impression that we did no evaluation and/or followup, it's just that what followup we did was of a very subjective, informal nature.

A followup-revision plan must be evolved which is workable and not too heavily research oriented, yet objective enough to meet the basic requirements of good evaluation procedures. Some appropriate degree of objectivity is essential for any good evaluation procedure. Measurement (or Evaluation) is always of a quality or attribute of a thing or person, and not direct measurement of the thing or person. Probably the major problem in measurement involves reaching agreement as to what a given idea, concept or thing actually means.

Followup (Measurement or Evaluation) in any field always involves three common steps:

1. Identifying and defining what is to be measured,--what is the problem -- determining objectives, etc.
2. Determining a set of operations in which the attribute to be measured is made manifest and observalbe, and-- the PLAN or Procedures.
3. Establishing a set of procedures or definitions for translating observations into quantative statements of degree or amount.

It seems essential to point out that measurement procedures are only tools. Insight and skill (translate that as experience) are needed to analyze and interpret the results in a meaningful manner. Only through valid interpretation of such results can measurement procedures made a real contribution to our curriculum material development procedures.

Once you (or CDC personnel) develop materials, we plan to approach some people (probably people like yourselves) for a "test-run" of the materials under real conditions. An evaluation of the usefulness and effectiveness of the materials will then be made to incorporate in any revision of materials to be made. Probably "field-testing" the materials will be based on the purpose for which the material was developed. An example: One evaluates a horse on its' ability to trot or run, not on its' ability to give milk; that evaluation is for a dairy cow. Appropriateness of evaluation is essential to useful results.

Once the "trial run" is completed, the curriculum material will need critiquing and revising to correct any deficiencies discovered in the "trial-run." Such changes will be made at this point. The material will be printed and disseminated for use by other persons at this time.

We anticipate evaluating the curriculum material on these kinds of points:

1. Usefulness to teachers
2. Ease of use
3. Appearance
4. Generalization potential
5. Relevance to students
6. Cost of production or duplication
7. Uniqueness
8. Need
9. ?

CDC personnel will be available to help groups in developing and utilizing these materials. We are willing to serve as consultants when needed, and plan to work with personnel on a team and group basis in utilizing curriculum materials.

We envision that the primary users of our material will be the following groups:

1. Junior High School Teachers - Students
2. Senior High School Teachers - Students
3. Post Secondary Programs
4. Adult Programs

We recognize the need to help elementary teachers, but our primary focus at present is on the older student population, due to funding restrictions. We do hope that there will be a "filtering-down" of ideas to the elementary levels.*

The curriculum materials we develop in the future should be higher in quality, more relevant, and easier to use than any materials developed by us in the past. Only through cooperation with groups such as you can we reach our goal in the CDC. Thus followup and revision are essential parts of our plan and goals for curriculum material development in the next eighteen months and in the future.

*P.S. Perhaps our elementary teachers may contribute toward a "filtering-up" of ideas to the Junior High and Senior High levels.

Rosemary Mead

CURRENT SOCIAL OBSERVERS

Since career education is a present synthesis of ideas which have long historical lineages as well as a concept which has implications for future educational emphases, it is important to examine selected perspectives held by those trying to assess what continuing social and vocational changes will require in individual coping abilities. Since the early 1950's, a number of books have become available whose focus has been on the implications for the individual of a growing technological cast in American society. They have identified and discussed the fact that in order to serve the complexity, the interdependent nature and the bigness of industrialism and the new technologies which have evolved in the United States, a proliferation of large corporate structures has resulted. Indeed, they indicate that these big corporate structures have become characteristic of all institutions in this society--economic, social, political, education, religious--and have stimulated a continuing tendency toward urbanization. Their observations might be thought of as distributed along a continuum of reaction from pessimism to optimism about the psychological price which these phenomena will cost individuals attempting to deal with them.

Among the classic works concerned about individual interaction with society was Whyte's Organization Man (1956). The book was essentially targeted on the effects of corporate organizational expectations upon middle management and men who were upward strivers for status and power. Much of the book's content was concerned with the potential destruction of individuality and the concurrent acceptance of conformity which modifies individual behavior in ways defined by the organization.

A contemporary work to Whyt's dealing with complementary sociological perspectives on the same themes, was Riesman's The Lonely Crowd (1950). This book focused upon the transition of societies from "tradition directed" to "inner-directed" to "other-directed" with each phase imposing a behavioral sanction--respectively shame, guilt, and diffuse anxiety--shaping or restricting individual behavior to social norms compatible with the emphasis of each phase. Riesman contended that in contemporary American society persons were becoming normless, without deeply held personal convictions about behavior or values as these reflected self-affirmation. Without such personal reference points, Riesman viewed people as constantly erecting figurative radar antennas by which to constantly tune in on others about what behavior is appropriate in one circumstance and then another.

During this period many observers had begun to identify the vast number of roles in which the public and private worlds of each person required participation. Riesman contended that if persons involved with constant role switching do so by attempting to constantly meet the expectations of others, there is the danger that individuals will lose touch with their personal convictions, preferences and values, and will become insatiable in their desire for the approval of others. Immersed in such "other direction" one may fail to develop the inner resources which shape aspirations and feelings leading to a commitment or mission for one's life.

Lack of freedom and power to impose oneself upon the environment in positive and purposeful ways has been labeled psychic isolation by Kimball and McClellan (1962). Thses authors described the American society in 1962 as a richly textured one offering a greater variety of interests and opportunities to a greater proportion of people than any society the world had known before. But unlike the agrarian society of the nineteenth and early twentieth centuries which provided absolute standards of behavior, embedded in history and religion, contemporary society "offers no fixed and eternal ends in life, but only powerful dynamic means, as its major gifts to the individuals that make it up."

Kimball and McClellan described the need for the individual to come to terms with the vast differences in the expectations of the private and public worlds, the world of family and friends on the one hand and the world of complex superstructures--segmented, specialized, impersonal--on the other. These authors argued that if individuals were to avoid being overwhelmed by the manifold nature of opportunity and personal responsibility for sorting it out and committing oneself to it, they must be educated to understand it and the ways by which its personal implications can be assessed and used.

Reich's best-selling book, *The Greening of America* (1970), analyzed the American society with particular emphasis upon its failings as viewed by the youth culture. He proposed an analysis of American society's social evolution in ways somewhat similar to the earlier propositions of Riesman (1950). Reich contended that individual behavior is affected by what he describes as "Consciousness." "Consciousness," as he defined it, is "any given individual's perception of reality, his whole world view. .....It is that by which he creates his own life and thus creates the society in which he lives" (Reich, 1970: 13, 15). The three phases of Consciousness which he described are formed by the economic and social conditions affecting individual behavior at a historical point in time. Reich argues that Consciousness III, the life view of the current generation of youth, is a reaction to the machine-rationality of the corporate state and to the depersonalization, meaninglessness and powerlessness of which it stands accused. Consciousness III emphasizes man's subjective nature, his needs for community rather than competition, and co-existence rather than exploitation of nature. Reich described how work would be viewed by the new generation as follows:

> The new way of life proposes a concept of work in which quality, dedication and excellence are preserved, but work in nonalienated, is the free choice of each person, is integrated into a full and satisfying life, and expresses and affirms each individual being (p. 19).

Drucker (1971), whose work is perhaps the most directly relevant of the persons cited in this section to the current propositions of career education, argued that Reich's observations about Consciousness III being the wave of the future are wrong in the sense that they are a "description of what happened in the recent past, rather than a forecast of what will happen in the future." Drucker's assertions were based upon the economic realities of the 1970's which he believed face youth. He held that changes in population characteristics, technologies, the cost-squeeze relative to available financial resources, and patterns of occupations would combine to reemphasize the importance of preparation for a productive life and educating oneself about choices available.

In an earlier work, Drucker (1969) maintained that the current occupational structure was undergoing a shift to what he described as a knowledge economy requiring knowledge workers. He contended that the emerging industries--information, development of the oceans, material sciences, solving the problems of megalopolises--would require knowledge applied through systems approaches. He stated: "The systematic acquisition of knowledge, that is, organized formal education, has replaced experience--acquired traditionally through apprenticeship--as the foundation for productive capacity and performance" (p. 40). In addition, he contended that "the productivity of the worker will depend on his ability to put to work, concepts, ideas, theories--that is, things learned in school--rather than skills acquired through experience" (p. 41).

Drucker speaking directly to the matter of education maintained that:

> We learned in World War II, with respect to the manual crafts, that we could compress years of apprenticeship into weeks, or at most months, of organized and systematic learning.......average people, became highly skilled craftsmen in little time and enjoyed the learning experience.......With this experience the shift to knowledge work and knowledge industry actually began.......a knowledge foundation enables people to unlearn. It enables them in other words to become 'technologists' who can put knowledge, skills, and tools to work, rather than 'craftsmen' who know how to do one specific task one specific way.......This ability to gain advanced skills through programmed acquistion of knowledge makes traditional craft structures untenable ....We need a massive effort to find, identify, develop, and place the largest possible number of Negro knowledge workers as early as possible. This means going into elementary schools. It means working with boys and girls at a very early age, helping them to plan careers, encouraging them to stay in school and to learn, showing them opportunities, examples and models ....We will have to replace 'vocational training' by the education of technologists.......people capable of using theory as the bases of skill for practical application in work (Drucker, 1969: 268, 303, 309, 318).

In an analysis of the actions and the verbalizations of the new generation, Drucker insisted that attacks upon depersonalization, manipulation, corporate society and the "Establishment" really obscure their concern with what he visualized as the "burden of decision" with which society's present characteristics confront them. He added that "The society of organizations force the individual to ask of himself: 'Who am I? What do I want to be? What do I want to put into life and what do I want to get out of it?'" Thus, as modern organizational society creates manifold opportunity for choice and decision, it also imposes upon the individual a level of responsibility for what he is and what he becomes unprecedented in human society.

Toffler's (1970) thesis that accelerated change brings with it adaptational problems for man, which he described as "future shock," also has relevance to career education. He cautioned that implicit in "future shock" is a phenomenon called "overchoice." He described the matter as follows:

> Ironically, the people of the future may suffer not from an absence of choice, but from a paralyzing surfeit of it. They may turn out to be victims of that peculiarly super-industrial dilemma: overchoice (p. 264).

Toffler indicated that potential overchoice is related to some other behavioral implications. He argued that available evidence suggests that confusion in orientation and erratic decision-processing also occur in the presence of an imbalance in environmental overstimulation and information overload. Together these factors may contribute to "decision stress" (Toffler, 1970: 355). Basically, it was suggested that the more choices available, the more novel each is; and the more frequently choices are imposed upon the individual, the more information the individual requires; the more rigid he may become about the veracity of decisions already made, the more he may attept to excape psychologically be different forms of ecasion and the manifestation of defensive behavior, or physically in any available forms of withdrawal.

Summary

The above observations while selective tend to support the kinds of shifts in emphasis reported in the previous socion. They indicate that while there was validity to an emphasis on preparing persons on the basis of industrial or occupational demand, such an emphasis needs to accommodate the manifold opportunity for expressing choice and individual preference in the present occupational/educational structure as well as in that of the future. Such emphasis also supports the need to address systematically the acquisition by students and adults of those information-processing and choice behaviors which would reinforce personal power to affect one's life.

The observations cited reflect what has and what can happen in a society where technology, corporate structure, and their personal implications occur without the awareness of persons affected. None of these observations necessarily indicate that the current society represents a plague upon the individual but rather that education must acknowledge directly and programmatically ways of helping persons locate themselves and find thier occupational, educational, and personal mobility in a constructive and informed fashion in addition to being prepared to be productive.

Prepared by Carl F. Lamar
Asst. Supt. for Vocational Educ.
State Dept. of Education
Frankfort, Kentucky 1/7/72

CAREER EDUCATION A DEVELOPMENTAL PROCESS

What it Means

The term "career education" is not new. It has been with us a long time. However, career education based on performance or behavioral objectives is a new educational concept. It is now in an evolutionary stage of development. It seems to mean different things to different people. Basically, it is an attempt to conceptualize the whole program of education as a single developmental process--one that prepares each individual for employment in the "world of work" and for his role in society. It is an attempt to bring all aspects of education into their appropriate relationship in producing the desired intellectual development of each individual--self-fulfillment.

Career education is an approach to the development of a comprehensive program of education focused on understanding the importance of careers and career developmental tasks. It is a task-oriented approach, rather than a subject-centered approach, which is based on individual behavioral or performance objectives and career-oriented goals. It is not intended to be one's total education or just a redefinition of the traditional concept of vocational education. Career education is believed to be a significant part of one's total education--perhaps the central thrust, and specific vocational preparation is considered to be an important part of career education--that of special preparation for employment in the occupation of one's choice.

There appears to be widespread feeling that public education must be made more relevant to the needs of the people in today's technological society, and the anticipated needs of the future, by reorienting and restructuring the entire educational system around the theme of "career development." The pressing need is to better understand the total educational process and be able to put the different aspects together in a more meaningful and functional relationship so there will be the desired reinforcement, one to the other, as each individual moves through the educational process.

Aspects of Learning Significant to Career Education

Some significant aspects of the learning process, that give meaning to the concept of career education, are the following: education is a continuing experiential process which extends throughout one's active life; it is a growth or developmental process; learning is a process and a product, in the successive stages of the educational process each individual learns (process) with his learnings (product); learning readiness is an indicator of educational motivation and need which says that as one learns, his readiness for certain kinds of learning evolve; aptitude for learning is conditioned more by the time allowed for learning than by the inherent potential of the individual to learn; individualized instruction which allows for differences in the aptitudes of individuals and provides for learning at the individual's own rate in a flexible individualized schedule is essential for effective teaching and learning; level of competence needs to be the measure of completion of a unit of instruction rather than a fixed amount of time devoted to the unit; more emphasis needs to be placed on problem solving as the approach to decision making in the performance of assigned manipulative tasks in career development; learning results in a change in individual behavior, therefore, behavioral objectives should become the logical basis for curriculum development; and a primary purpose of education is to prepare individuals for career-oriented goals.

An Educational Program Based on Behavioral Objectives

It is believed that each stage of growth and development, from the beginning to the end of the educational process, each individual should be expected to display certain kinds of observable behavior based upon his understanding of himself in relation to his environment. His environment includes his family, community, and the world of work that surrounds him. He should be expected to acquire the ability to perform appropriate tasks in his environment, which includes work. It is believed that if the appropriate behavior of all individuals in our society can be described at each level of their educational development, then leaders in education should be able to design an educational program that would produce the expected behavior. This is the great challenge that has been thrust on educational leaders today in the new concept of "career education."

Providing Appropriate Educational Experiences

There are several generally accepted stages or levels of individual growth and development in the educational process. According to the concept of career development, as an integral part of the educational process, certain educational experiences should be provided at the different levels. It is believed that each succeeding level should build upon the preceding level and reinforce the learnings already acquired. Therefore, continuity in curriculum planning must become a major concern to program planners. Unless an adequate foundation is laid at each stage of development, students will be handicapped in their ability to function properly in the succeeding stages.

A logical approach to career development must start at the very beginnig of the educational process in early childhood and extend through the productive life of adults. The different stages or levels of career development generally referred to are indicated in Figure 1. These stages or levels may be described as follows:

(1) Awareness - Awareness of one's self in terms of his own activities, his environment, and the broad picture of the world of work that surrounds him (grades K-3).

(2) Self-appraisal - Self-appraisal as a basis for developing self-understanding of the significance of play and work in the daily life of each individual (grades 4-6).

(3) Understanding of concepts and principles pertaining to the economic system and manpower needs of the economy - Reasons why people are expected to work, the rewards that can be expected from productive employment, and the importance of sound career decisions and appropriate occupational preparation for each individual (grades 7-8).

(4) Orientation to, exploration of, and work experience in the different occupational families or clusters - Appropriate educational experiences that will enable each individual to formulate his occupational preference and make definite decisions leading to special or specific occupational preparation (grades 9-10).

(5) Special or specific occupational preparation - Occupational preparation which will lead to immediate employment at high school completion, or to further education at the postsecondary education level (grades 11-12).

(6) Postsecondary vocational, technical, or paraprofessional education - Special or specific occupational preparation which should have begun in high school and will lead to employment below the baccalaureate degree level (grades 13, 14, 15).

(7) College preparation leading to the baccalaureate degree - A clearly defined preparation program which will lead to employment in professional occupations at the completion of the baccalaureate degree (grades 13-16).

(8) Placement and follow up of all individuals - A placement and follow-up program organized on a continuing basis, including all individuals that have been enrolled in the program--those who completed and those who left before completion.

(9) Continuing career education - An adult and continuing education program for everyone who needs occupational upgrade, refresher, or retraining, as a basis for successful and satisfying employment, including high school, postsecondary, and higher education graduates and dropouts. It can be expected that many of these people will need to be recycled back through certain parts of the educational system depending on the relevance of the programs offered.

(10) Career-oriented guidance and counseling - An effective program of career-oriented guidance and counseling for all individuals at each stage or level of their career development--to satisfy their personal and career development needs, interests, and aptitudes.

Career Development the Focus of Curriculum Planning

Career education has been conceived as a comprehensive educational program whereby the curriculum would be unified and focused around the theme of career development. It is intended to have the active involvement of the total school population. Students would be constantly guided and motivated to pursue their basic interests through sequential experiences at the successive stages or levels of educational development. Hands-on experiences would be emphasized at all levels of the educational process so as to bring out the natural tendencies of each individual and to motivate each individual to the degree that he would want to continue to learn until he had reached his career objective. The desired experiences would be provided in a variety of ways, including laboratory exercises, role playing, field observations, simulated work experience in the school laboratory or shop, actual work experience in a business or industry, and other appropriate activities.

Unifying and refocusing the curriculum would be largely task oriented, geared to the individual differences of the students, and based on behavioral objectives. The basic subject areas would be restructured around the focal point of career development for each individual. All individuals in school would be expected to follow a curriculum sequence that would prepare them for continuing career education at the postsecondary school level.

In the elementary grades, students need to learn many things about themselves, their immediate surroundings, and their world of play and work. It has been said "that play is a child's work." Through play activities children tend to fantasize the "work roles" they see adults perform.

Children need to be made aware of their day to day activities and identify the reasons why they are important. Each child should be given the opportunity to become thoroughly acquainted with himself in terms of his activities so that he can develop realistic perceptions about play and work. This would require the active participation of each child in the things he is expected to learn. Piaget contends that:

> "It is the action of the subject (individual) upon objects or events in the environment that leads to the assimilation of new ideas, accommodation of existing mental structures to the new ideas, and establishment of mental equilibrium on a higher level."

The intended purpose is to move the educational experience from an awareness of one self, a broad understanding of play and work, exploration and classification of concrete things, to the ability to form concepts in an abstract sense so as to identify relationships between what a person likes to do and possible occupational roles in the future. The continuing purpose is to use the natural motivation and tendencies of children to explore the "world of work" so as to form a base of knowledge for developing realistic attitudes and understanding about the occupational roles that people perform.

Opportunities need to be provided for all individuals to express their interests, develop their talents, and explore areas in which they can develop new interests and abilities. The primary focus is on self-appraisal and understanding as a means of assisting each individual in the process of self-concept formation. Gradually each student should become increasingly familiar with occupational classifications and a wide range of occupational roles.

In the middle grades, students should become familiar with the economic system--its financial rewards and benefits to the individual, family, and community. They should learn about the different occupational families or clusters. They should be given the opportunity to explore various clusters through laboratory exercises, simulated experiences, field observations, and some actual work experience.

The experience provided each individual at this level is intended to make him aware of the need to formulate occupational preferences and make definite decisions regarding special or specific occupational preparation. Each individual should be led to realize that through the educational process they have considerable control over their future careers if they do careful planning, get adequate experience, and make sound decisions.

In senior high school, each individual should become thoroughly oriented to the different occupational clusters and be given the opportunity to exploe, in depth, those of special interest so they can select the one where they will expect to give special attention and get specific occupational preparation. The possible options are: (1) specific occupational preparation leading to employment at high school graduation; (2) special occupational preparation to be continued at the postsecondary level leading to employment below the baccalaureate degree level; and (3) preparation for entrance to higher education with the intention of earning the baccalaureate degree. Each student would then be expected to pursue the program designed for the option that he has selected in the latter years of high school.

At all times the different options would be left open for students to move from one option to another if they desired. All students would be provided work experience in selected occupational clusters if they felt the need for it, and appropriate arrangements could be worked out. The intention would be to assure all high school students with some marketable occupational skills by the time they complete high school.

In postsecondary programs, below the baccalaureate degree, each individual would be expected to continue his preparation for the specific occupation which he has chosen. His preparation should lead to job entry at the end of the program or, possibly, to further education in college which would lead to the baccalaureate degree.

In adult and continuing education, appropriate occupational programs would be developed to meet the needs of all adults, regardless of whether they completed high school, postsecondary school, or college. The purpose of programs at this level would be to meet the continuing needs of each adult whether it be upgrade or refresher training or preparation for a new job or new career. Each individual should be given the opportunity to get the occupational training needed to keep him at his maximum employable potential based on his interests, needs and capabilities, and the manpower requirements of the labor market.

Some Suggested Objectives of Career Education

The objectives to be accomplished as one moves through the different stages or levels of career development would be:

- to provide the kinds of experiences that will stimulate each individual's thingking and contribute to the desired development of his intelligence--his mental capacity;
- to develop appropriate attitudes about the personal, social economic, and psychological significance of work;
- to develop the self-awareness of each individual in relation to his environment;
- to expand the occupational awareness and occupational aspirations of each individual;
- to develop a clear understanding of the economic system, the manpower requirements of the system, and their importance to the individual, home, and community;
- to develop an awareness of the future role that each individual is expected to play in the economic system, and the importance if occupational preference and vocational preparation to their future welfare in performing their expected role;
- to provide appropriate experiences which will help individuals evaluate their interests, abilities, needs, and values as they relate to the economic system and possible future employment;
- to provide students with adequate orientation of and exploration in all relevant occupational families or clusters which will enable them to select the one of primary interest;
- to provide indepth exploration and work experience in the occupational cluster that each individual has selected which will lead

to the choice of a specific occupation in which special preparation is needed for job entry;

- to provide intensive preparation in specific occupations, selected by the students, which will lead to job-entry level skills at high school graduation or to further education at the postsecondary level;
- to provide continuing occupational refresher, upgrade, or retraining opportunities for adults so they can be satisfactorily employed throughout their productive years of life;
- to provide guidance and counseling at each stage of career development that will help all students make sound educational decisions regarding the options that are available to them (all options would be open for individuals to move from one to another occupational cluster, or specific job if they desired);
- to provide appropriate job placement and follow-up services for each individual which should furnish the feed-back information needed to improve the occupational success of each individual and the effectiveness of the total educational program;
- to improve over-all performance of students at all stages of career development, by making the basic subjects more meaningful and relevant to each individual through the process of unifying and focusing them around behavioral objectives which are related to career-oriented goals.

If we can expect reasonable success in reorienting and restructuring the total educational system around the theme of career development, there are many basic changes that must take place in the present system. Practically everything that influences the development of an educational program needs to be carefully researched. The understandings, attitudes, and basic skills of those responsible for carrying out the program must be focused in the right direction if we are going to have the necessary leadership.

Need for Structured Educational Leadership

The educational leadership needs to reappraise everything it *believes* about education and the educative process. It needs to evolve a clear understanding of *what* education is all about, *where* education really takes place, what is the actual difference between "education" and "schooling," and how they relate, *what* is meant by the "open school" and the community school "without walls," how the educational process should be structured so as to take advantage of all available resources, *who* needs to be involved in determining what the educational program shall be and how it shall be implemented.

Basically, there are *three* kinds of people in our society that are needed to bring about desired changes in things that affect society, including educational change. Each group has a vital role to play. There are the *idea people*--those who have the ability to evolve concepts of "what ought to be." Not all people possess this ability. The ones who have this ability need to be identified and their talents need to be appropriately utilized. There are the *engineers* or *designers*--the people who have the ability to take the ideas that have been clearly conceptualized by the "idea people" and structure or engineer the means by which the idea may be tested, demonstrated, and implemented. Then there are the *implementers*--the people who have the ability to take the ideas that have been clearly conceptualized and structured, tested, and demonstrated as new programs, services, or activities that ought to be adopted, and implement them as an integral part of the continuing educational process.

It is this kind of identification and utilization of our human resources that is called for if "career education" can ever be expected to move to the "center of the stage" and become a viable reality in the educational system of this country.

Recommended Approaches to Career Education

The strategy that needs to be developed so as to make the educational process relevant to the needs of people, in terms of behavioral or performnce objectives and career-oriented goals, must include the following:

1) Appropriate federal, state, and local involvement, coordination, cooperation, and financial support.

2) Development of a sound basic philosophy of education by those charged with the responsibility of bringing about the desired changes and improvements in education on a continuing basis.

3) Appropriate attention to the total educative environment, including that outside of schooling, with the intention of improving the total situation for the benefit of the entire society in which we live.

4) Appropriate structuring of the total educational system within the state which will assure the desired articulation of the different developmental levels of education--elementary, middle, secondary, postsecondary, higher, adult and continuing education.

5) Appropriate structuring of the total educational system within the state so as to clearly delineate and define the role and responsibility of the different institutions, agencies, and organizations which have been established and supported by the state for the purpose of serving the educational needs of the people. A definite plan of coordination, cooperation, and mutual reinforcement needs to be established with respect to:

   (a) the different governing boards of education--State Board of Education, Council of Higher Education, Boards of Regents, and local boards of education;

   (b) State Department of Education and its relation to institutions of higher education as they work with local educational agencies--local school districts, area vocational schools, community colleges, private schools; and

   (c) advisory boards, councils, and committees as they relate to the operating units within the total educational structure of the state.

6) Appropriate attention to the different ancillary or supporting services that will be needed to evolve the desired changes and improvements in the educational system on a continuing basis. They include the following:

   1) comprehensive long-range and annual program planning;
   2) administration and leadership;

3) Education professions development, teacher education, and supervision;
4) research and related activities;
5) career-oriented guidance and counseling;
6) curriculum development; and
7) continuing state program evaluation.

U.S. Commissioner of Education Dr. Sidney P. Marland, Jr., has spoken out vigorously for a new emphasis in education--an emphasis on what he calls "education renewal" and "career education." He said,

> "What the term 'career education' means to me is basically a point of view, a concept--a concept that says three things: First, that career education will be part of the curriculum for all students, not just some. Second, that it will continue throughout a youngster's stay in school, from the first grade through senior high school and beyond if he so elects. And, third, that every student leaving school will possess the skills necessary to give him a start in making a livelihood for himself and his family, even if he leaves before completing high school."

This concept deserves careful consideration. If it has merit, it should be clearly conceptualized, carefully tested, broadly demonstrated, and universally implemented. This will require complete cooperation of all educators with the help of parents and the support of leaders in government and in the "world of work" at the federal, state, and local levels. The challenge has been thrust before us to accept it or reject it. Where do we stand?